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# FINANCIAL TIMES

PUBLISHED IN LONDON AND FRANKFURT

No. 28,123

Thursday March 20 1980

\*\*\*20p

CONTINENTAL SELLING PRICES: AUSTRIA Sch 15; BELGIUM Fr 25; DENMARK Kr 4.25; FRANCE Fr 4; GERMANY DM 2.0; ITALY L 700; NETHERLANDS Fl 2.0; NORWAY Kr 4.25; PORTUGAL Esc 35; SPAIN Ptas 75; SWEDEN Kr 3.75; SWITZERLAND Fr 2.0; EIRE 20p; MALTA 20c

## NEWS SUMMARY

### GENERAL

#### Soviet 'germ plant leak'

THE USSR may have broken an international biological warfare treaty. There has been a series of reports on an accident in Sverdlovsk, an industrial city in the Ural mountains, last April.

Large numbers of people apparently contracted anthrax, a bacterial disease whose toxin is an agent in germ warfare. A newspaper carried warnings on avoiding infection. Over 1,000 died, according to West German reports, which pointed to a leak at a military installation near the city.

The Soviet Foreign Ministry has denounced U.S. suggestions of a treaty violation as "impudent slander." Page 3

#### Carter victory

President Jimmy Carter won a convincing victory over Senator Edward Kennedy in the Illinois Democratic primary election. Republican Ronald Reagan also scored a vital win over his chief opponent, John Anderson. Back and Page 4; Background, Page 23

#### Channel link

Any new Channel tunnel project will have to be financed by private capital to gain Government approval, Transport Minister Norman Fowler said. British Rail is discussing a plan with French railways. Back Page; Parliament, Page 10

#### Iranian amnesty

Ayatollah Khomeini announced an Iranian new year amnesty under which 61 common criminals were released from jail.

#### Rhodesia strikes

A wave of strikes spread through Rhodesia, with 4,000 workers out demanding Premier Robert Mugabe fulfill election pledges.

#### Italian tax trap

The Italian Government has published a "red book" listing 33,000 suspected tax dodgers in an effort to clamp down on evasion.

#### Pollution protest

Five anti-pollution demonstrators were arrested in Paris after emptying bins of crude oil outside the Elysee palace. The protest followed the wreck of a tanker off northern Brittany.

#### Hunger strike

Two blind people will go on hunger strike outside Indian Prime Minister Indira Gandhi's home next week to back demands for Government jobs for the blind. The protest follows a march on Sunday in which 100 were injured in police attacks.

#### Forest win

Nottingham Forest, the holders, reached the semi-finals of the European Cup when they beat Bayern 1-1 in Berlin (2-2 on aggregate). Real Madrid beat Glasgow Celtic 3-0 (aggregate 3-2).

#### Tusker task

A New York sculptor took a cast of a live five-ton elephant and intends to make 10 bronze replicas to raise funds for wildlife conservation.

#### Briefly . . .

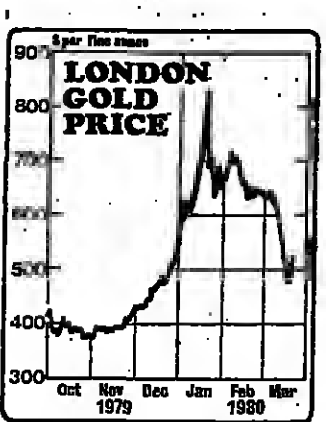
West Germany's four parliamentary parties have agreed not to slander opponents in this year's election campaign. Schmidt to spearhead SPD campaign. Page 2

Man has been committed for trial accused of stealing 9,000 wild birds' eggs worth £25,000 from a museum.

### BUSINESS

#### Gold up \$39; Mines rise 28.8

● GOLD closed \$39 up in London at \$520, after touching a peak of \$535.



● STERLING closed 10 points down at \$2.1920 after fluctuating sharply. Its trade-weighted index was 72.3 (72.4). DOLLAR eased to DM 1.8720 (DM 1.8765) and its index was 89.1 (89.2).

● EQUITIES remained uncertain, and the FT 30-share index gained 0.3 to close at 432.0. GOLDS followed the bullish rise, and the Gold Mines index rose 28.8 to 294.3.

● GILTS improved and the Government Securities index closed 0.24 up at 64.40.

● WALL STREET was up 2.56 at \$84.18 before the close.

● IRISH PUNT closed at \$1.9755—a depreciation of 10 per cent since last year.

● JAPANESE Government approved a 50.8 per cent rise in electricity rates and a 45.3 per cent rise in gas prices after raising the official discount rate to 9 per cent. Back Page; Editorial comment, Page 22

● BELGIUM tightened domestic credit, taking the National Bank discount rate to 14 per cent—a rise of 2 per cent.

● HONG KONG Government agreed in principle for the Commodities Exchange to establish a gold futures market. It would be the colony's fourth gold market. Page 31

● BRITISH ALUMINIUM said it may set aside £12.4m to provide for disputed charges for the supply of electricity to the Invergordon aluminium smelter. The company does not accept liability for the charges. Back and Page 7; Results Page 24

● FORD MOTOR'S corporate credit rating in the U.S. was cut by Moody's Investor Service from the top-ranking Triple A to Double A.

● FORD PHILIPPINES was given permission to assemble in Manila the Mazda car of Toyota Cogvo (Japan), and is likely to phase out the Escort. Page 5

● CARTER Administration has opposed suggestions in Congress that Japan be pressed to reduce its U.S. car sales. Page 5

● BRITISH AEROSPACE expects 1979 sales to exceed £1bn, and final accounts to show a backlog of orders worth more than £3bn. Page 8

● AEROSPACE INSURANCE market in the UK had its worst year in 1979 with outlays of about £162m. Page 7

#### COMPANIES

● DICKINSON ROBINSON, the accounting, printing and engineering group, ended last year with pre-tax profits 16 per cent higher at £27.7m. Page 24, Lex

● EEFAM, the frozen food and freers group, raised first-half pre-tax profits by 50 per cent, from £2.74m to £4.1m on turnover of £79.93m (£53.25m). Page 28

#### CHIEF PRICE CHANGES YESTERDAY

(Prices in pence unless otherwise indicated)

RISES	
Treas. 12pc 2003-06	287 1/2
Armstrong Equip.	50 1/2
Barlow Rand	390 + 5
Cowle (T.)	43 1/2 + 3 1/2
DRG	101 + 7
Horizon Travel	268 + 11
Howard Pevens	75 + 5
Johnson Matthey	282 + 7
Tilling (T.)	133 + 9
Tube Invs.	280 + 8
Willis Faber	248 + 8
Berkley Explor.	93 + 10
EP	356 + 8
Charterhall	61 1/2 + 4 1/2
Premier Cons.	301 + 9
Shell Transport	362 + 30
Siebens (UK)	600 + 8
Tricentral	282 + 18
Ashton Mining	120 + 13
Blyvoor	596 + 102
Bracken	132 + 22
Cons. Gold Fields	473 + 39
Harrogate	222 1/2 + 21
Impala Plat.	270 + 20
Leichardt	290 + 25
North Broken Hill	156 + 14
Other Exploration	184 + 18
Pacific Copper	364 + 24
RTZ	215 + 27
Rustenburg Plat.	76 + 18
Samantha	205 + 15
Utah Mining Aust.	205 + 15
Vaal Reef	223 + 24
FALLS	
Channel Tunnel	170 - 30
Reckitt and Colman	152 - 6
Vesper	150 - 13
Walker (J.)	95 - 7
Wair Group	40 - 14

## Sadat and Begin to see Carter over Palestinians

BY JUREK MARTIN, U.S. EDITOR IN WASHINGTON

President Anwar Sadat of Egypt and Mr. Menachem Begin, the Israeli Prime Minister, will confer separately with President Jimmy Carter of the U.S. in Washington next month, the White House announced last night.

The U.S. has called the meeting in an effort to prevent the autonomy talks over the future of the occupied West Bank breaking down, thus jeopardising the broader American aim of peace in the Middle East.

The purpose of the meetings, for which no firm dates have yet been set, would be to review the progress and pace of negotiations between Israel and Egypt on autonomy for Palestinians on the West Bank and Gaza Strip by May 28, but which have made little progress recently.

Mr. Jody Powell, Mr. Carter's Press Secretary, was at pains to emphasise that the U.S. President was not necessarily going to try to nail the two leaders down to meeting the May 28 goal.

Choosing his words with care, he said: "It is the clear hope of all those concerned that the (negotiating) process should have sufficient momentum to carry forward even if full agreement is not reached in every single detail."

All three leaders had agreed that it was better to confer "somewhat in advance" of the May 28 goal rather than to wait until it was more imminent.

Mr. Powell emphasised that summit meetings should be seen as part of a continuing negotiating process, not as a response to the particular crisis in the autonomy talks.

Comparisons with either Camp David in 1978 or Mr. Carter's Middle East shuttle a year ago were not valid, because on those occasions no mechanism for negotiations was in place, he said.

Underlining this, he announced that Mr. Sol Linowitz, Mr. Carter's Middle East representative, will leave this week-end to confer first with Mr. Begin in Jerusalem, then with Mr. Sadat in Cairo and later to attend the opening session of the autonomy talks in Alexandria.

Mr. Powell said there was no intent to extend the separate meetings into a fully fledged three-way summit, though the door to this was not closed.

There have been reports that Mr. Begin and Mr. Sadat have urged Mr. Carter to agree to such a summit, but these have not been confirmed in Washington.

But at no stage did Mr. Powell or other government officials hint that the U.S. had any new set of proposals to break the deadlock in the autonomy talks.

Some further inkling of U.S. thinking may be obtainable today when Mr. Cyrus Vance, the Secretary of State, is due to testify to Congress on the Middle East.

Mr. Sadat and Mr. Begin have been urging Mr. Carter to throw himself into the negotiating process. But his political advisers, mindful of the problems caused by the reversed vote against Israel in the United Nations earlier this month, are known to feel the Middle East could be a political quagmire for the president.

Mr. Carter, however, seems to hold the view that, since the Camp David accords and the subsequent Egyptian-Israeli peace treaty constitute the greatest foreign policy triumph of his administration, he would be remiss in not doing as much as he could to ensure that the terms of those agreements were adhered to.

His political difficulties with the American Jewish vote, though they still may embarrass him to a degree in next week's New York primary, are seen to be less of a threat to his securing the nomination after his crushing defeat of Senator Edward Kennedy in Tuesday's Illinois primary.

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## Governor defends monetary restraint

BY PETER RIDDELL

**MONEY POLICY** must remain restrictive to reduce the inflation rate, even though the effort may involve depressed demand and output for a year or two, Mr. Gordon Richardson, Governor of the Bank of England, said yesterday.

He defended the current approach to monetary policy and discussed recent fears about the immediate impact on industry.

At the *Guardian's* Young Businessman of the Year lunch, he said Britain's present monetary policy "has more than an accidental resemblance to the policy pursued under previous administrations."

The policy was "not as some seem to try to paint it, a novel form of a peculiarly English vice, but a prudent and necessary response to inflationary dangers."

Mr. Richardson acknowledged British industry was going through a difficult period. "It is having to face very determined competition. Demand, both abroad and more especially, perhaps in this country, is unlikely to be buoyant."

It was an illusion to suppose that Britain was free to choose between defeating inflation and some other course. "We cannot sit back, with costs and prices moving up, rapidly again, and not seek to master inflation."

Monetary restraint could not be had without cost. "Surely, it would now be generally agreed that there is no alternative to relatively high nominal rates of interest until the pace of inflation slackens. This is part of the price that we have to pay to get inflation down."

The Bank of England's quarterly bulletin, published last night, takes up the same theme.

The economic commentary presents a gloomy view of the immediate future. "With the prospect of a large fall in stocks, a decline in output of 2 per cent or more—and perhaps twice as much in manufacturing industry—now seems probable," it says.

The Bank highlights financial pressures on industry as a result of a rapid rise in costs and the appreciation of sterling. Consequently, the real pre-tax rate of return on industrial and commercial companies, excluding North Sea activities, could fall from an average of 3 1/2 per cent last year to a record low of 2 1/2 per cent in 1980.

Some 3,300 staff would be taken on in the prisons, police support services and immigration services. The Department of Health and Social Security would take on 3,800 because of increased demand for benefits and the Department of Employment 3,200 because of revised assumptions about the level of unemployment. Other, more minor, increases totalled 1,200.

"Black economy" exemption attacked. Page 10

## Earnings rise is highest in four years

BY PETER RIDDELL, ECONOMICS CORRESPONDENT

**AVERAGE EARNINGS** are now growing at an annual rate of nearly 10 per cent, the highest figure for four years. This follows a steady acceleration in the underlying rate since last summer as the higher settlements of the current pay rounds have worked through.

Department of Employment figures published yesterday show that the earnings index covering 21m employees in the whole economy rose by 19.9 per cent in the year to January 1980 from 100 in January 1976.

This is officially reckoned to be close to the underlying rate of increase as various special influences have largely offset each other. It compares with a rate of just under 19 per cent in the late summer and just under 15 per cent last spring.

The 12-month rate is likely to continue to rise as the generally higher pay settlements of the current round replace the lower ones of a year ago. While there has been a steady climb in the rate, there has so far been nothing like the leapfrogging increases from one pay deal to the next which led to the runaway wages explosion of the mid-1970s when earnings growth was over 30 per cent.

Earnings are also being pushed up by the phased implementation of the Clegg pay comparability awards in the public sector, which have so far added 1 per cent to the index and are expected to add 2 per cent by the summer.

The overall rate of earnings growth is not an exact guide to the level of settlements. For example, officials estimate that drift—such as promotion and redundancy payments—may have accounted for 2 to 3 per cent of the increase. Wage settlements may have been about 17 to 18 per cent, though there is some evidence of a wider spread in the level of awards than in recent years.

For instance, the Confederation of British Industry's Pay Databank survey of manufacturing industry, also published yesterday, shows that over 52 per cent of all pay deals notified to it since last August have been for increases of 1 1/2 per cent or less.

Only 11 per cent of settlements were for more than 20 per cent, and 36 per cent were for increases of between 16 and 20 per cent. This takes account of the number of employees covered by each settlement.

The CBI said yesterday that these figures suggested that "the general level of pay settlements is not rising despite the recent acceleration of inflation."

The actual earnings figures are distorted by a variety of influences. For example, the index fell slightly between December and January because of the normal seasonal absence of end-of-the-year bonuses, because of the direct impact of the steel strike—reducing the index by about 2 per cent—and because of a fall in overtime pay accentuated by the steel dispute.

However, bad winter weather and widespread industrial disputes depressed earnings in the comparable month of January, 1979, and the two influences probably offset each other so that the 12-month rate is broadly unaffected.

The change in the pattern of settlements this year, with more workers settling earlier than before, has probably added about 1/2 per cent to the 12-month rate.

The February and March indices will be depressed by the continued effects of the steel strike.

The older index of average earnings covering about 11m workers, mainly in production industries, fell 0.5 per cent in January to 415.2—January, 1970=100, seasonally adjusted—for a 12-month rate of increase of 20.5 per cent.

Basic weekly wage rates of manual workers increased by 0.3 per cent between January and February to 338.8—July, 1972=100. This index has risen by 15.3 per cent in the last 12 months.

£ in New York

	Mar. 18	Previous
Spot	£2.1845-1860	£2.1930-1945
3 mths	0.84-0.85	0.81-0.82
6 mths	0.84-0.85	0.81-0.82
12 mths	0.85-0.86	0.80-0.81



## Staffing levels will rise, Civil Service admits

BY PHILIP BASSETT, LABOUR STAFF

**CIVIL SERVICE** staff numbers are likely to rise by 3,000 this year, despite the round of cuts announced by the Government, the Civil Service Department admitted yesterday.

The disclosure could prove embarrassing to the Government, which pledged in its election manifesto to reduce the size of the administration.

Following a pay settlement averaging 25 per cent, the Government last year cut the Civil Service's cash limit by 3 per cent and imposed a three-month recruitment ban, which together caused the loss of about 20,000 posts. In December, a further cut of 40,000 over three years was announced.

Last week the Government announced another across-the-board cut of just under 2 1/2 per cent or about 15,200 posts, and Mr. Paul Channon, Civil Service Minister, said the Government had gone as far as it could in cutting manpower in one year.

But yesterday, in evidence to a sub-committee of the Commons' Treasury and Civil Service select committee, the Department admitted that staff numbers between April 1 this year and April next year would rise, rather than fall, from 712,000 to 715,000. The figures do not take account of the 2 1/2 per cent cut.

MPs on the committee were "extremely concerned" at the admission. Mr. David English said the country had been led to believe that net cuts in the Civil Service were being made. Mr. Richard Shepherd said that what were programmed as cuts seemed to be increases.

Sir John Herbec, second Permanent Secretary at the Civil Service Department, agreed. He said: "There will be departments which have made quite specific cuts in the things they do but which will have in a year's time a higher staff total than they do now."

Sir John said the reason for the rise was that the Government had been forced to take on extra staff in certain departments to deal with changing economic conditions.

Some 3,300 staff would be taken on in the prisons, police support services and immigration services. The Department of Health and Social Security would take on 3,800 because of increased demand for benefits and the Department of Employment 3,200 because of revised assumptions about the level of unemployment. Other, more minor, increases totalled 1,200.

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"Black economy" exemption attacked. Page 10

## Shell in Saudi refinery deal

BY RAY DAFTER, ENERGY EDITOR

**THE Royal Dutch/Shell Group** is expected to gain access to more than 100,000 barrels a day of Saudi Arabian crude oil as a result of a refinery deal due to be concluded in the next few months.

The project would give Shell its first direct access to Saudi crude. It involves construction of a 250,000 barrels-a-day refinery at Jubail industrial complex on the Gulf. Investment will be more than \$1.4bn, of which Shell is expected to contribute about \$250m.

Access to crude oil, and a proportion of refinery products, has been offered by the Saudi Government as an incentive for Western companies entering joint ventures with the state. Earlier this month Mobil signed a similar contract for a refinery at Yanbu, on the Red Sea coast.

Shell would not say how much crude oil it would be able to buy from Petrozin, Saudi Arabia's state oil corporation. Negotiations are continuing.

Petrozin Weekly, a leading oil industry publication, says it was thought in the mid-1970s that the Saudis would provide 1,000 barrels a day for each \$1m invested. On this basis, Shell would have

about 250,000 b/d. But inflation, the dollar's reduced value and lower availability of oil have led to a review by the Saudi Government. It is understood Mobil will receive about 500 b/d for every \$1m invested.

Saudi Arabia is producing oil at 9.5m b/d, but is known to want to reduce this to 8.5m b/d. Its decision to offer "incentive" crude will mean restructuring the allotment of oil to the four partners of the Arabian American Oil Company—Chevron, Texaco, Exxon and Mobil.

Mexico to produce more oil. Back Page

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## EUROPEAN NEWS

## Schmidt to spearhead SPD poll campaign

BY ROGER BOYES IN BONN

THE WEST German Social Democratic party has announced its programme for the 1980 general elections, and has made quite clear that Chancellor Helmut Schmidt will be the party's main weapon at the polls.

The programme was released amid a rash of election fever. The ruling Social Democrat Free Democrat (SPD-FDP) coalition has now formally announced that the elections will be held on October 5 and all four major parties—SPD, FDP, the Christian Democratic Union (CDU) and the Bavarian-based Christian Social Union (CSU)—yesterday agreed on rules of conduct for the election campaign. Remarkably low election spending limits have been fixed, with the CDU entitled to spend DM 36m, the CSU DM 9m, the FDP DM 5m and the SPD DM 40m.

The SPD programme portrays the Chancellor as a bastion of reliability and common sense against the "incal-

culable risk" of a government headed by Herr Franz Josef Strauss. The manifesto goes under the slogan of "security for Germany"—security that is in terms of defence, energy supplies and the economy—and in its tone bears a resemblance to the Christian Democrat programmes of the 1950s which promised the electorate that there would be "no experiments."

Herr Hans-Juergen Wischniewski, deputy SPD chairman, said that no concessions had been made in the manifesto to the small anti-nuclear Ecologists party which won a significant slice of the vote at the Baden-Wuerttemberg state election at the weekend. The Ecologists won many of their votes at the expense of the SPD.

The SPD programme, however, describes nuclear power as unavoidable and gives a high priority to the solution of the problem of atomic waste disposal. There is a hint too that Bonn will in future cut down on



Herr Wischniewski (left): no concessions to Ecologists. Herr Schmidt: main weapon.

state subsidies to industry — "the watering can principle should not determine how state aid is distributed within the economy." In its treatment of the NATO

decision to modernise its theatre nuclear weapons, the programme stresses the importance of the offer to negotiate with the Soviet Union as an integral component of the NATO move. The SPD leadership line, both on nuclear power and on weapons modernisation, met with opposition from the left wing at the party conference in December. But comments by a broad range of SPD politicians yesterday indicated that the party had reconciled itself to the inclusion of the two points in the manifesto.

The election spending limits are the same as those for the 1976 campaign, that is, in real terms substantially lower. This will be encouraging to the Finance Ministry. The initial campaign outlay is met from party coffers but this is refined by the state through a complex proportional compensation scheme. Even so, the limit for the FDP is still well above the resources of the Ecologists party which will contest the election in October.

## Throwing the book at Italian tax evaders

By Paul Betts in Rome

A "RED BOOK," listing 33,000 suspected tax dodgers, was published yesterday by Sig. Franco Reviglio, the Italian Finance Minister. This is the first time the names of suspected tax evaders have been revealed by the authorities. It is part of a campaign by the Finance Minister to reduce tax evasion in a country where the average taxpayer has traditionally declared only about a quarter of his taxable income. The list of suspects has been drawn up by the Italian fiscal police, the so-called Guardia di Finanza, following checks on some 65,000 people. The Finance Ministry claims that the 33,000 suspects have failed to declare a total of L172bn (£30m) due to the state.

Publication of the Red Book has caused a public storm. Sig. Reviglio has been accused of unconstitutional behaviour in revealing the names of suspects who have not been charged with fiscal irregularities. He has indicated, however, that he intends to go ahead with further checks and will publish more names. The Guardia di Finanza is expected to investigate the tax returns of 100,000 Italian citizens this year.

According to the Red Book, a volume of some 1,000 pages, the major tax evaders are to be found in the Italian oil industry who are suspected of declaring less than a twentieth of their real income.

They are followed by financial operators who declared only a fifth of their income, and by wholesalers declaring only a third. Interestingly, the book contains the names of no well-known personalities, suggesting the existence of widespread tax evasion among smaller businessmen. Some progress has been made in reducing tax evasion in recent years. Stricter procedures and the recent introduction of prison sentences for tax irregularities is expected to produce some L500bn in extra revenues. However, Sig. Reviglio said a general reform of the fiscal system is still necessary to combat effectively tax evasion in Italy.

## Italy reports £560m January trade deficit

BY OUR ROME STAFF

ITALY HAS reported a sizeable trade deficit in January of L1,134bn (£560m) compared to a deficit of L331bn (£170m) in January 1979, according to official trade figures released yesterday. The January figure was the third successive monthly deficit.

The January deficit follows a L1,719bn (£800m) trade deficit last December and a L1,448bn (£760m) monthly deficit last November. Italy's overall trade deficit last year totalled L4,723bn (£2,5bn) compared to L363bn in 1978. The growing deficit largely reflects the increased cost of raw material imports, especially oil. However, there are also signs of declining export competitiveness in the country's key manufacturing sector.

At the same time, the lira is now coming under pressure again because of the strengthening of the dollar which is also having a substantial impact on the country's oil import bill. It is likely that this will lead to a further increase in petrol prices in Italy with top grade petrol rising by about L20 to L700 a litre.

In view of the central bank's decision at the weekend to tighten controls on the money supply, some Italian commercial banks have already increased their lending rates to prime borrowers by one point to 20.5 per cent.

While the level of industrial output is still sustained there are signs that it could gradually slow down, especially in view of higher money costs and the failure so far to win trade union agreement to increase labour productivity.

These renewed economic problems have led to speculation over the possibility of a new lira devaluation. But the Italian central bank appears reluctant to resort to devaluation as it believes it would represent the soft option to relieve pressure on the economy.

Instead, the central bank is seemingly in favour of introducing a number of longer term recovery measures to correct the fundamental weaknesses of the country's economic system, including modifications in the highly inflationary wage indexation system and reduction of the ever-expanding public sector deficit.

However, in the face of the latest political crisis, the monetary authorities could be forced to intervene should the lira continue to lose further ground to the dollar and against other major European currencies.

## Private industrialist nominated to head Confindustria

BY OUR ROME STAFF

THE TOP executive of Confindustria, Italy's national employers confederation and the equivalent of Britain's CBI, yesterday nominated Sig. Vittorio Merloni to succeed Dr. Guido Carli, the confederation's outgoing president.

Sig. Merloni, managing director of the Merloni domestic appliances group based in Ancona on the Adriatic coast in central Italy, is now expected to be formally elected at Confindustria's annual meeting early in May.

His nomination reflects the decision of the Confindustria membership to choose a new president from the ranks of private industry at a time of renewed difficulties for the private sector and the economy at large. In contrast, Dr. Guido Carli, a former Governor of the Bank of Italy who was chosen to lead Confindustria four years ago, had little direct experience in industry.

Dr. Carli's election, backed at the time by Sig. Giovanni Agnelli, chairman of Fiat, Italy's

largest private enterprise, was largely designed to enhance the status of Confindustria. In this Dr. Carli succeeded, but he failed in the task of producing a lasting and constructive dialogue with the trade unions in large measure because of the growing intransigence of the labour movement.

This led to demands by the Confindustria membership for the appointment of an industrialist closer to day-to-day dealings with the unions at shop-floor level to replace Dr. Carli

when his mandate ran out. At the same time, representatives of small and medium-sized industries were pressing for a chairman who was likely to be sympathetic to their problems and less linked to the large industrial groups.

Moreover, Confindustria members in southern and central Italy were anxious to see the election of a representative from their area to broaden the confederation's geographical representation. In the past, Confindustria has been orientated

largely towards the north because of the heavy concentration to private industry there. The protracted consultations to find a successor to Dr. Carli reflected the difficulty of the choice facing Confindustria. But Sig. Merloni's nomination appears to have been an acceptable compromise since the 47-year-old industrialist is a representative of the younger generation of Italian businessmen. He also comes from central Italy where he has managed his own successful company.

## Cyprus air traffic dispute 'hazardous,' claims Turkey

BY METIN MUNIR IN ANKARA

CONFLICTING CLAIMS put forward by Greek and Turkish Cypriot administrations about the control of air space over Cyprus poses serious hazards to international aviation in parts of Eastern Mediterranean, according to the Turkish Ministry of Foreign Affairs.

The "hazardous" stem from a controversy which started in 1974 when Turkey intervened in Cyprus. After the war, the Greek Cypriot Government said

that it could not provide air traffic services over northern Cyprus which had fallen to the Turks and which became the Turkish Federated State of Cyprus.

In 1977, the Turkish Cypriots stepped in to fill the vacuum and started providing air traffic control from their new airport at Ercan. They established a service in two new air corridors.

Last month Greek Cypriots issued a note to airmen

(Notam), announcing that aircraft using these corridors should now contact not Ercan but the Greek Cypriot airport at Larnaca.

The Turkish Foreign Ministry claims that the Greeks cannot provide this service because Larnaca does not have links with Ankara and consequently no information about air traffic between Ankara and Cyprus.

"The Greeks (Cypriots), who are offering air traffic services,

do not have the technical links necessary to provide for aviation safety," a Ministry statement said.

The Greek Cypriot move was understood to have been prompted by the lifting by Turkey of a 1974 notice to airmen during the Cyprus war. This Notam extended Turkish air space over parts of Greece and south over Cyprus. Both Greece and Cyprus refused to recognise this extension which they considered an

encroachment on their sovereign rights. Greece shut down the Aegean to aviation.

When Turkey lifted 1974 notice to airmen, as a gesture of goodwill towards Greece, the situation reverted to the status quo ante. Greece opened up the Aegean air space to aviation after nearly six years. Greek Cypriots took the opportunity to reclaim the air space they had lost to Turkish Cypriots after the war.

## Prague rejects dialogue with civil rights group

BY LESLIE COLTITT IN BERLIN

THREE YEARS after the founding of the Charter 77 human rights movement in Czechoslovakia, a leading Prague Communist has said there will be no compromise with the few remaining activists in the movement.

Mr. Jan Fojtik, a secretary of the Central Committee, writes in the current issue of a Prague ideological monthly that there can be no dialogue with the spokesmen of the "so-called Charter 77" whom he accuses of being "social elements" committing "criminal acts."

Charter 77 has been weakened by the imprisonment and exiling of its most prominent

members and the reluctance of most Czechoslovaks to become involved in politically dangerous human rights activities. Mr. Fojtik said the United States and other "bourgeois governments" want Czechoslovak officials to begin a dialogue with Charter 77 as a sign that Prague is fulfilling the terms of the 1975 Helsinki declaration. He calls this a "gross interference in the internal affairs of our country."

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بكرامن الخليل



# Toxic germ accident alleged in USSR

BY OUR FOREIGN STAFF

WESTERN DIPLOMATS believe that there is a strong possibility that the Soviet Union has broken a major international treaty by producing toxic germs which could be used in warfare.

The basis for their belief is a series of reliable reports that a serious accident occurred in the Soviet Union last April when over 100 people died and several hundred had to be hospitalised after lethal anthrax germs escaped near the military city of Sverdlovsk in the Ural Mountains.

The Soviet Union yesterday angrily denied allegations that the 1972 treaty banning use of germs had been violated. It described as "impudent slander" a U.S. government request for further details to establish if the treaty had been broken.

An official of the Sverdlovsk city council, who was also reached by telephone from Moscow, when asked about the reported accidental release of biological agents, said: "I cannot say anything at all about that question."

The Financial Times first learned about events in Sverdlovsk in Moscow last spring. The reports—which were then unsubstantiated—claimed that large numbers of people were dying in the city, as a result of a leak at a germ-warfare plant, and that hundreds were being hospitalised.

A vital clue which underlined the reports came in a series of three articles by Vecherny Sverdlovsk—the

town's evening newspaper—at about the same time warning residents of a disease described as "Siberian Ulcer."

Siberian ulcer is the Russian term used to describe a deadly bacterial disease called anthrax whose toxin is one of the agents used in germ warfare.

Yesterday a staff member of the newspaper confirmed that the articles had been run describing how the residents of the industrial town should protect themselves from the rare disease which, it said, was normally transmitted through contact with infected livestock.

The Sverdlovsk newspaper is unavailable in Moscow and Sverdlovsk is closed to foreigners. It was, therefore, impossible to find independent corroboration for the story which has now been provided with the appearance of other accounts of an accidental leak and mass deaths in Sverdlovsk and the explicit confirmation of the appearance of the articles in Vecherny Sverdlovsk.

Biologists say that the only way anthrax could break out on a wide scale, if the bacteria were not being deliberately produced, would have been through the presence in Sverdlovsk of large numbers of infected cattle or sheep.

Sverdlovsk, however, is a steel-producing centre, and the only concentrations of domestic animals of any size are cows for milk production kept in collective farms some 50 to 100 miles away.

One month ago a West

German paper reported that the deaths had exceeded 1,000 and on April 3 at Military Installation No. 19 near Kaschino. This is 20 miles from Sverdlovsk, where a special department was set up in a hospital staffed by the Red Army. The Soviets were reported as having no antidote, and those infected



admittance because their lungs died less than four hours after and bronchial tubes became paralysed.

Western diplomats are reacting with concern at the possibility of Soviet interest in bacteriological weapons. Such weapons have been tested by various countries including Britain in the Second World War but have never been used.

Military analysts consider them unpredictable, difficult to control and of dubious military value. Western officials also argue that whatever the Soviet Union may do, it has tended to stick to the letter of its treaties with

the West—and producing and stockpiling germs for offensive purposes is forbidden by a treaty which was signed in 1972 and came into force in 1975.

This treaty has been signed by all major powers except France—though this has domestic legislation of similar effect—and China. The first review conference on the treaty started in Geneva on March 3. Delegates report that the review had gone well.

The Soviet Union had resisted attempts to make it disclose information on what materials it had destroyed following signature of the treaty. Disclosure was not required by the treaty but was seen by the West as a confidence building measure. There was also the possibility of a permanent international committee being set up to deal with issues arising from the treaty and in particular with potential breaches. Now, however, delegates fear that this possibility has receded.

In the 1960s, chemical and bacteriological weapons were linked for the purpose of disarmament, but, following a British proposal, they were separated and by 1972 "the convention on the prohibition of the development, production and stockpiling of bacteriological (biological) and toxin weapons and their destruction" was signed.

For the past four years the two major holders of chemical weapons, the U.S. and the USSR, have been negotiating bilaterally on a treaty banning chemical weapons. Slow pro-

gress has been recorded with the main problem being how to verify that the treaty is being observed.

The peculiar horror of biological warfare, and of the particular weapons that rely on highly virulent and infectious bacteria and viruses, is that they are aimed directly at civilian populations. Before the advanced radiation neutron bomb was developed, even nuclear weapons had other purposes beyond killing people. Knocking out military and industrial sites.

The military attractions of both biological and chemical warfare are that they offer a chance to secure enemy-held territory without destroying strategic installations, and that they are relatively cheap both to produce and to deliver with biological weapons. A small quantity of harmful living bacteria or viruses sprayed in the atmosphere will be inhaled, multiply and spread. The agent can be sprayed from the Soviet Vozakh passenger jets systems or spread by animals.

It is advances in microbiological research over the past decade which now offer Governments their best opportunity yet to develop effective biological weapons. Genetic engineering techniques involving recombinant DNA mean that it is now possible to splice complex chemical substances known as toxins into bacteria like E. coli which inhabit the human gut and reproduce quickly to "manufacture" the toxins.

## EEC group warns of trade threat from Japan

By John Wyles in Brussels

A DEMAND that the EEC should be ready to take protective measures against rising imports of Japanese engineering and electronic goods has been made by Orgalime, the organisation representing engineering and metal working trade associations in the Community, and five EFTA countries.

Responding to growing concern among its 23 members, the organisation has compiled an 11-page memorandum detailing the EEC's rising trade deficit in engineering goods with Japan and calling for a tougher stand.

It questions the adequacy of the Community's approach to trading relations with Japan and urges "unified political will" leading to a "definite mandate to the Commission from member countries to proceed to stronger measures in cases where co-operative methods have had no effect."

Among other things, Orgalime wants to prevent a repetition of Japanese gains in the consumer electronics sector and in other areas such as electrical components. It argues that as long as the Japanese Government knows that the EEC position has no "solid core" of readiness to act, there is unlikely to be much change in present trends.

These include a sevenfold increase in Japanese electronics exports to the Community between 1970 and 1978, so that the overall deficit in mechanical engineering and electrical goods has risen from broad balance to nearly \$3bn, or 60 per cent of Japan's total trade surplus with the EEC.

Orgalime says there is no EEC need for blanket protection against Japanese imports, but it calls for careful scrutiny of Japan's compliance with GATT rules on dumping, subsidies and restrictive business practices. This in turn requires improved observation of the Japanese home market and the need for an early warning system to ensure Community wide action before "important sectors of European industry are irretrievably damaged."

In a reference to consumer electronics, the memorandum suggests that the import tide is now virtually impossible to turn and that as a result the position is already "virtually irretrievable."

## French moderate line on UK budget issue

BY ROBERT MAUTHNER IN PARIS

IN A move intended to take some of the acrimony out of the dispute over Britain's contributions to the EEC budget, the French Government yesterday indicated that it was prepared to examine British demands for a reduction in its payments.

Through a communiqué, published after the weekly Cabinet meeting, showed that there has been no change in France's basic position on the problem, its tone was more conciliatory than the tough statements made by French Ministers over the past few days.

Significantly, it made no mention of France's previous threat that it would decline to discuss Britain's demands at the forthcoming Brussels summit, in the absence of formal EEC Commission proposals on the subject.

The communiqué said that "in keeping with the principle of Community solidarity, France was prepared to examine the demands by countries in exceptional difficulties as the result of their financial contribution." The UK was not mentioned by name, but the reference was clear.

That, however, appears to be the limit of the French concession, if it can be described as such. The communiqué emphasised that any measures taken to alleviate a member country's financial burden must be of limited duration and be compatible with the Community's budgetary resources.

while the UK has asked for permanent arrangements. In particular, the measure must be in line with forecasts for the Community's budget 1981.

The French Government also repeated its now well-publicised position that such measures "aimed at modifying the application of agreements signed and ratified by interested governments" could be adopted only in the context of a global settlement embracing all the problems in suspense in the Community.

The Government underlined its firm support for the "own resources" system of Community financing, under which member states pay all their customs duties, farm levies and a proportion of VAT receipts into the common budget.

The rules of this system, while expressing "Community solidarity," must be maintained in the future, the communiqué said. It also stressed that France rejected any mechanism which would re-distribute Community funds or reduce member states' net contributions according to criteria based on a country's wealth, as had been suggested by the British Government.

"France is not directly concerned by such a suggestion since it has not benefited in 1979, nor will it in 1980, from a surplus of Community payments. In any case, if the principle of a 'fair return' were accepted, it could not be applied to one country only."

## Thatcher is determined

BY ROGER BOYES IN BONN

BRITAIN DID not want to spark off a crisis in the European Community Mrs. Margaret Thatcher, the British Prime Minister, declared yesterday. But she stressed that she would hold out for a fair solution to the budget problem.

Speaking in a wide-ranging interview with Herr Rainer Barzel, a leading Christian Democrat politician, Mrs. Thatcher also deflected Britain's energy policies. Bonn, unhappy with the price and quantity of North Sea oil supplied to Ger-

many, has been urging a common energy policy.

Mrs. Thatcher said Britain already exported over half its oil to Europe, and the prices followed rather than led world market trends.

Undining her unhappiness with the way the budget problem was being handled, Mrs. Thatcher said: "If there is an EEC crisis then it will not be caused by the UK, but by those who expect her to pay the largest contribution despite her situation. Things cannot go on like this."

## Italian equipment 'no help' to Iraqi N-bomb

BY RICHARD JOHNS, MIDDLE EAST EDITOR

EQUIPMENT being supplied by Italy to Iraq will not contribute in any significant way to the Arab country's capacity to produce nuclear weapons, according to British scientists yesterday. They were commenting on U.S. Press reports which said the equipment could be used to manufacture bomb-grade plutonium.

The issue has become part of a campaign on Capitol Hill to block the sale by General Electric of the U.S. of gas-turbine engines required to power Italian-manufactured Lupo-class frigates ordered by Iraq. As yet the U.S. Administration has not granted export licences for the LM-2500 engines.

Indications are that it will now give the go-ahead.

The suggestion—attribution to officials in the U.S. Administration—is that "hot cells" which Italy has agreed to provide for Iraq are sensitive technology in the context of nuclear non-proliferation.

A "hot cell" is, in effect, no more than a protective shield required in any research involving radioactive materials. Iraq has embarked on such a programme and there are serious doubts about the commitment contained in its ratification of the non-proliferation treaty.

The Italian National Committee for Nuclear Energy has denied that it is selling research equipment of a kind that would enable Iraq to produce either plutonium or

enriched uranium of a kind required for the construction of a bomb.

France's agreement to supply weapons-grade enriched uranium to Iraq, as well as a research reactor, is considered more serious than the Italian deal. France was to have provided a low-enrichment fuel known as "Caramel" but recently announced that the fuel had not yet been sufficiently developed and that it would, therefore, be making available a "few kilos" of fuel enriched at 90 per cent.

France has given assurances that all non-proliferation precautions will be applied. At the same time it is generally acknowledged that a research reactor fuelled with highly

enriched uranium is a very poor producer of plutonium.

Paul Beits writes from Rome: U.S. irritation over Italian proposals to supply Iraq with spare parts for 20 Chinook helicopters made under licence by the Agusta state aerospace group and sold to Iraq before the revolution are believed to be behind State Department criticism of Italy.

The latest charges have been denied by Italy which claims it has not sold Iraq any technology that could help build a nuclear bomb.

Italy signed a co-operative agreement with Iraq four years ago which covered the nuclear sector, but it claims it has only supplied Iraq with nuclear technology for peaceful purposes.

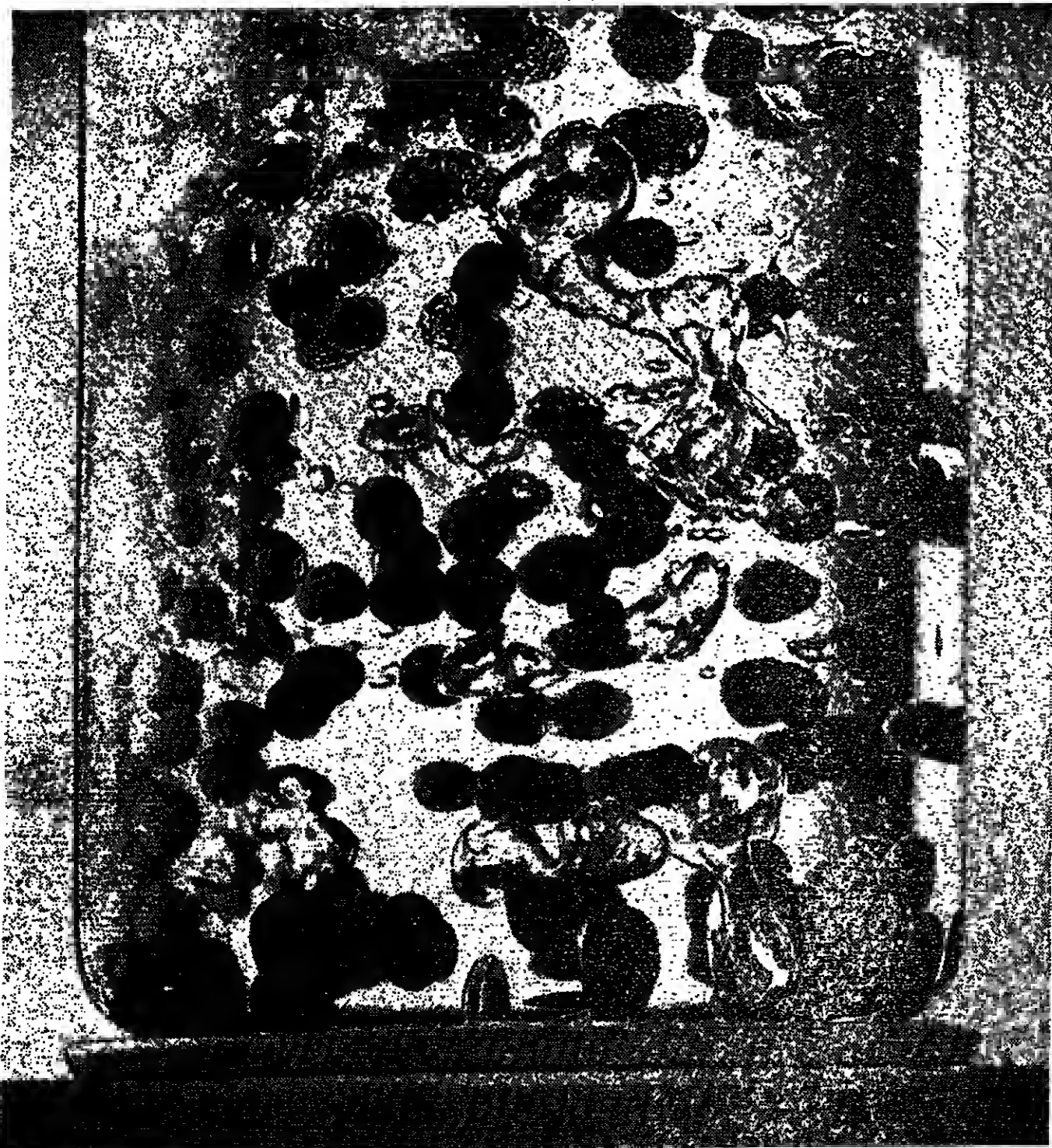
## Polish bishop to boycott national poll

By Christopher Bobinski in Warsaw

A POLISH Roman Catholic bishop has said publicly that he will not be voting in national elections this Sunday in protest against the harassment of religious ceremonies in Silesia, an industrial area in southern Poland. The harassment and the statement by Bishop Francis Musiel, of Czestochowa, threaten a deterioration in Church-state relations here.

Police yesterday also broke up a news conference at the home of Mr. Jacek Kuron, a spokesman for the Social Self-Defence Committee, a civil rights group. Mr. Kuron was announcing that his group had decided to call for a boycott of the elections.

# The advantages of burning coal like your wife cooks peas.



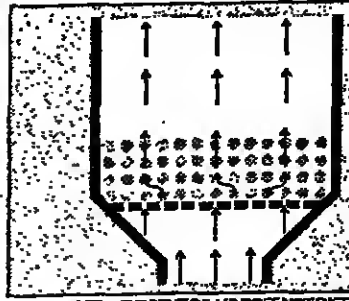
**The simple principle of fluidised bed combustion.**

Just imagine a red-hot bed of inert mineral matter like sand or ash.

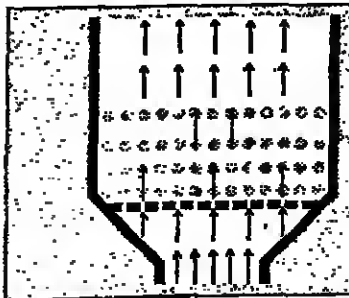
Now pass an upward current of air through the bed—at a certain velocity the particles of sand or ash will become highly turbulent and 'boil' in a similar fashion to a liquid.

You now have a fluidised bed into which you can inject and burn coal.

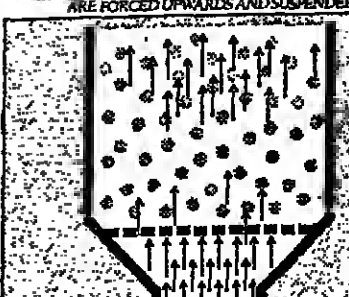
Rather like your wife cooking peas.



A GENTLE CURRENT OF AIR DOES NOT DISTURB THE MINERAL PARTICLES.



INCREASE THE AIR CURRENT AND THE PARTICLES ARE FORCED UPWARDS AND SPREAD.



INCREASE THE CURRENT FURTHER AND THE PARTICLES BEGIN TO ACT LIKE A FLUID.

**Save, save, save.**

Burning coal through fluidised bed combustion provides higher heat release rates than ever before possible.

It has the advantages of having no moving parts in the furnace, and high rates of heat transfer enable boiler sizes to be reduced.

Also, since combustion takes place at a relatively low temperature, a wide range of coals can be burnt efficiently.

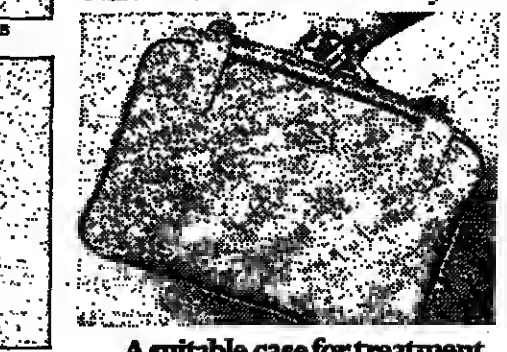
On an environmental level, the characteristics of fluidised bed combustion keep the emission of sulphur dioxide and nitrogen oxides well below the accepted standards.

**Putting theory into practice.**

Over the years, extensive development and experimental programmes have been carried out on fluidised bed combustion.

The resultant research and know-how means that Britain leads the way in this revolutionary technique.

Several plants already operate on a commercial basis in this country.



**A suitable case for treatment.**

Antler Limited are the biggest manufacturers of luggage in the UK, and were the first company to have an operational fluidised bed boiler on its premises. The boiler is a vertical shell type, and it provides space heating for Antler's four-storey building and replaces the old-fashioned Lancashire-type boilers.

The new fluidised bed boiler outperformed its predecessor by coping perfectly with the on-off conditions of Spring and Autumn, as well as having the capacity to deal with the arctic weather of the Winter of 1978/79.

However, the biggest difference was in economy.

The thermal efficiency of the new boiler is in excess of 80%, well above that of the old Lancashire-type boilers.

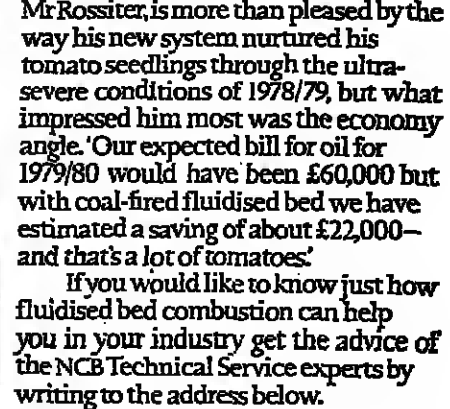
**The tomato plant.**

CWS of Marden, near Hereford, grow tomatoes, 8½ acres of them under glass. Half of their greenhouses are heated by a fluidised bed boiler.

The estate manager of CWS,

Mr. Rossiter, is more than pleased by the way his new system nurtured his tomato seedlings through the ultra-severe conditions of 1978/79, but what impressed him most was the economy angle. "Our expected bill for oil for 1979/80 would have been £60,000 but with coal-fired fluidised bed we have estimated a saving of about £22,000—and that's a lot of tomatoes!"

If you would like to know just how fluidised bed combustion can help you in your industry get the advice of the NCB Technical Service experts by writing to the address below.



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## OVERSEAS NEWS

## AMERICAN NEWS

David Lennon, in Tel Aviv, examines the likelihood of early elections  
Israelis losing their faith in Begin

BESET BY economic woes, deepening international isolation, and destructive Cabinet infighting, Mr. Menachem Begin's Government is once again the focus of talk about early elections.

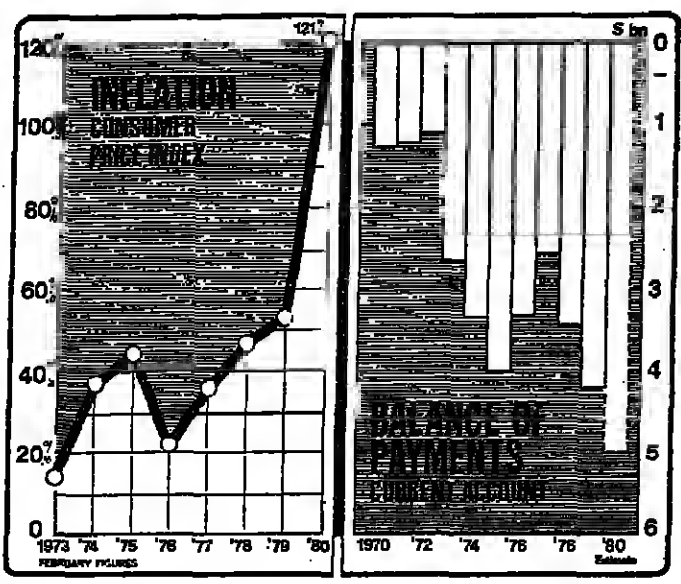
Early elections are "inescapable," says Mr. Shimon Peres, chairman of the opposition Labour Party, claiming that this time it is not just the view of his party, but of politicians in general.

He has some justification, for it was Dr. Yosef Burg, veteran leader of the National Religious Party, who first spoke in public recently about bringing forward the November 1981 elections. His party, with 12 members in the Knesset (Parliament), is the largest junior partner in Mr. Begin's 65-strong coalition.

Even Dr. Burg, the Interior Minister, was carrying only a little further the Defence Ministers remarks that the Government is making the public sick of it, and the Housing Minister's comment that the Government had made life in Israel a hell.

Leading members of the Democratic Movement, a junior coalition partner with six seats in the 120-member parliament, have asked for a meeting of their secretariat to decide on withdrawing immediately from the coalition. In the hope of bringing the Government down, Mr. Peres has responded to these anguished voices by holding a series of meetings with the coalition's smaller parties. He insists these talks were not designed to cook up an alternative coalition in preparation for new elections, but simply to persuade them that it is in the national interest to bring down the Begin Government.

Public support for the Government is now so low that opinion polls see the Likud block losing half its parliamentary strength if elections were held now. Labour, which ruled for 29 years before the Likud victory in 1977, is fore-



cast as winning an absolute majority for the first time in the history of the state.

But, of course, the possibility of the Likud block's strength being halved is keeping its divided partners rooted to their parliamentary seats, as it did through earlier crises when the Government appeared in danger of collapse.

The last crisis was in the autumn, when the Finance Minister's inability to juggle inflation and the gaping balance-of-payments deficit created by his own policy led to his replacement by Mr. Yigal Hurvitz.

Mr. Hurvitz's appointment gave the coalition new hope. A tough-talking, nononsense farmer turned politician, he made determined statements about righting the economy by curbing inflation and cutting the trade deficit.

His medicine was tight credit restrictions, slashed subsidies on basic consumer items, warnings of unemployment, and promise of a no-growth budget. Brave talk, but not exactly designed to please the blue-collar voting base of Mr. Begin's

Herut Party, the Likud Block's senior component. Neither did it please the businessmen who supported the Liberal Party, the Likud's second-largest component.

The stagflation-bla policies began to induce badly pleased anyone. But worse was his failure to keep government spending down. Despite unprecedented efforts to cut ministerial budgets in the 1980/81 budget, the 6 per cent cut effected in the social ministries was wiped out by a 9 per cent rise in local defence spending, which will lead to overall domestic government spending rising by 4.5 per cent this year.

Even as economists at the Bank of Israel, the central bank, were shaking their heads at what they saw as a budget likely to beat up the economy again, more bad news arrived.

Over the weekend, Mr. Hurvitz's anti-inflation policy was dealt two more blows. The hardest was the Cabinet's failure to back his stand against pay rise due to them under old agreements. The victory for the teachers, who had staged strikes and disruptions at

schools, is bound to encourage many other groups demanding equal benefits.

The other setback was an agreement between the Histadrut labour federation, the industrialists and the Treasury that the overall wage agreements be concluded in April. The minister had hoped to prolong the existing wage agreements automatically beyond next month's expiry date, with compensation limited to cost-of-living increments equivalent to 80 per cent of the rise in the cost-of-living index.

These breaches in Mr. Hurvitz's policy have begun to tarnish his image as a man who can push tough policies through the warring Cabinet for the benefit of the nation.

To accompany this loss of hope in the Government's ability to cure the economy came growing Western criticism of Israel's settlement policy in the occupied territories and a rising tide of open support for the Palestinian cause.

This intensified international isolation, with the increasingly open rifts with President Jimmy Carter's Administration in Washington, has worried both the politicians and the public in Israel. There is considerable anger within Israel at the Government's role in aggravating the dispute with Washington by ill-timed pronouncements about settling Jews in Hebron on the West Bank and expropriating 1,300 acres of Arab land in Jerusalem.

Mr. Peres actually speaks about the need for elections to "save the nation" from the ravages of Likud. There are increasing signs that some coalition members feel the same. And will act accordingly if they feel their own guarantee of political survival in the ensuing upheaval.

Although the Begin Government has survived similar crises, the feeling is growing that this may be one crisis too many.



Ezer Weizman: visit denied in S. Africa

## Weizman mission to Pretoria

By Our Tel Aviv Correspondent

ISRAEL'S Defence Minister, Mr. Ezer Weizman, paid a secret three-day visit to South Africa last week to discuss security matters with South African leaders. Israel Radio reported yesterday.

The Israel Government has refused to confirm the report and South Africa has categorically denied that the visit took place.

Mr. Weizman was sent on the secret mission by Mr. Menachem Begin, the Prime Minister, who only informed three other Cabinet members. The news was leaked to the radio after Mr. Weizman reported back to Mr. Begin on Tuesday night.

Israel is not keen to give publicity to its ties with South Africa, although it has not been able to hide the fact that two-way trade has grown sharply in recent years and now exceeds \$100m a year.

South Africa sells Israel steel, coal, tobacco, and other commodities, while Israeli sales to South Africa include phosphates, animal feed, and sophisticated electronics.

Despite a complete blackout on military relations, it has been widely reported abroad that Israel has sold a large range of military equipment to South Africa, including missiles, boats and sea-to-sea missiles.

It has also been reported that South Africa supplies the steel and know-how used for making the armour-plating of the Israeli-made Merkava medium battle tank.

The Weizman visit, if it took place, came only days after Israel had denied reports that it had been involved with South Africa in detonating a nuclear device in the Pacific last year. It has also been reported abroad that Israel co-operates with South Africa on nuclear research.

Relations between the two countries were strengthened and deepened after the visit to Israel in 1975 by Mr. John Vorster, then the South African Prime Minister.

In February, 1978, the first-ever official visit by an Israeli Minister to South Africa was made by Mr. Simcha Erlich, then the Finance Minister in the Begin Government.

The radio yesterday quoted unnamed Government officials as saying that Mr. Weizman's trip was one of a series of regular visits by Ministers from the two countries, not all of which are publicised.

## BBC advisers for Mugabe

A FOUR-MAN BBC team is to leave for Rhodesia next week to advise on broadcasting after independence, our Foreign Staff reports.

The team is likely to be in the country for two or three weeks and will make recommendations to Mr. Robert Mugabe's Government on development, finance, technical operations and training.

The team leader will be Mr. Peter Hardiman Scott who retires next week as chief assistant to the director-general.

## Congressman seeks \$2bn more in budget cuts

BY JUREK MARTIN, U.S. EDITOR, IN WASHINGTON

THE Chairman of the House Budget Committee yesterday presented an alternative regime of cuts in public spending approximately \$2bn more severe than that advanced by President Carter in his anti-inflationary package of last week.

The plan was unveiled by Representative Robert Glaimo, the Connecticut Democrat, against a background of a likely intense congressional debate on cutting the budget in the weeks ahead.

Although his blueprint has the qualified endorsement of the House Democratic leadership, his figures are by no means set in concrete. Even his determination to reduce spending by more than the President may not hold up in the ensuing congressional deliberations.

Mr. Glaimo's package envisages cutting expenditure by \$15.5bn in the 1981 fiscal year beginning in October. The President proposed cuts of \$13bn-\$14bn,

the full details of which are to be revealed later this month.

If his proposals are accepted, Mr. Glaimo believes that the 1981 federal budget could be in surplus by \$4.9bn. But he acknowledged that his sums were predicated on a lower rate of inflation—less than 10 per cent—for the current calendar year than is likely to occur. The Administration anticipates that consumer prices will rise by closer to 12 per cent.

## Freeze

The specifics of Mr. Glaimo's cuts include the ending of Saturday postal deliveries, the elimination of the \$1.7bn share that the states get from general revenue sharing (this is also an Administration proposal), fairly sharp cuts in existing public works programmes, a freeze in federal job hiring, a 2 per cent cut in federal administrative costs and the

slower purchase of oil for the national oil stockpile. Even Congress itself would forego a scheduled cost-of-living income increase.

He also nibbles, but hardly bites, at what many see as the critical bullet of the indexation of social security and other welfare benefits. He has proposed that cost-of-living adjustments to such benefit payments only be made once a year, at present. But he is not suggesting that this should be applied to all social programmes, nor is he proposing that cost-of-living adjustments be held below the prevailing rate of inflation.

Also likely to surface in the Congressional deliberations are ideas for additional revenue raising measures (perhaps via an income tax surcharge on wealthier Americans) and the earmarking of the \$10bn proceeds of the oil import fee to finance selective tax cuts.

## Argentina and Brazil discuss nuclear pact

BY ROBERT LINDLEY IN BUENOS AIRES

A BRAZILIAN nuclear power mission arrived in Buenos Aires this week as part of Argentina's stepped up activity in its ambitious nuclear programme. The mission was led by Sr. Herveo Guimaraes de Carvalho, president of Brazil's nuclear power commission.

The two countries, both customers of West Germany's Kraftwerke Union (KWU), are discussing exchange scientists and technicians, exploitation of uranium reserves, production of radio-isotopes and manufacture of reactors.

If a nuclear accord results from the talks it could be signed when Gen. Joao Baptista de Figueiredo, Brazil's President, visits Argentina in May.

Argentina, a Latin American leader in nuclear power development, has signed bilateral nuclear agreements with Bolivia, Chile, Colombia, Paraguay, Peru, Uruguay and Venezuela. In 1977 it became the first Latin American country to export nuclear technology when it agreed to supply Peru with an experimental reactor.

Argentine officials consider the talks urgent because a U.S. nuclear mission is due to arrive on Sunday. Late last year, the U.S. State Department has eased its pressure on Argentina to agree to the U.S. position on nuclear

## non-proliferation.

Argentina has repeatedly declared its willingness to satisfy the requirements established by the International Atomic Energy Commission. But it has stated that it would not accept additional requirements by the commission.

It is doubtful whether Argentina will be able to maintain this position. Last year it contracted with KWU for the installation of a third nuclear reactor, Atucha Two, near Buenos Aires. But Bonn has refused so far to approve the deal until it gets further guarantees from Argentina.

At the moment, a West German delegation led by Herr Gunther Well, Secretary of Foreign Relations, is in Buenos Aires.

Admiral Carlos Castro Madero, president of Argentina's atomic energy commission, said last week that Argentina "has no intention" of developing nuclear weapons.

This week Gen. Albert Buchalet—the "father of the French atomic bomb" in Buenos Aires on a private visit—said Argentina could "make an experimental bomb... although I do not know if this would be very interesting for Argentina, which has no enemies in sight."

## Oil workers' pay deal may test guidelines

BY IAN HARGREAVES IN NEW YORK

OIL REFINERY workers will vote in the next few days on a pay settlement, which seems certain to end their 11-week-old strike.

The agreement, reached between the Oil Chemical and Atomic Workers Union and Gulf Oil, is expected to set a pattern for the whole industry.

As the first major pay contract of the year, it will supply the first test of the voluntary pay guideline of 7.5-9.5 per cent recently adopted by the Administration. President Carter announced in his weekend anti-inflation package that monitoring of the guidelines would be stepped up by increasing the staff of the Council on Wage and Price Stability.

The oil deal appears to be a borderline case. It involves a straight \$1-an-hour increase for this year and a 10.5 per cent increase for the second year of the contract.

The 10.5 per cent award is permissible under the council's rules for workers without automatic cost-of-living adjustments. But fringe benefits in the deal will have to be examined in detail.

Meanwhile Ford Motor has decided not to appeal against the council's decision that its autumn pay settlement was outside the 1980 guidelines.

The deadline for an appeal passed on Tuesday. Mr. Peter Pestillo, vice-president for labour relations, said: "Although we believe we have a strong case, we think it would be ineffective to appeal."

Ford will be officially listed as a violator and the federal Government's procurement agency will be recommended to exclude Ford from bidding on contracts.

Although several companies have been listed so far, the contracts ban has not been used. Ford, however, will be much the largest company to find itself in this position.

The council also announced that it would be seeking special price reports from 250 companies because of "disturbing price increases" in recent months. The oil refiners figure prominently among the companies affected, although the decision to investigate their pricing in the final quarter of last year is unrelated to the current labour settlement.

## Chicago's political machine sputters

By David Buchan and Marilyn Edin in Chicago

MAYOR JANE BYRNE of Chicago "ain't doing cartwheels" over Tuesday's primary election results in Illinois, a spokesman said yesterday in pointed understatement.

Mrs. Byrne had put the vaunted Chicago political machine behind her political choices—most notably Senator Edward Kennedy for the Democratic presidential nomination and Alderman Edward Burke, her hand-picked Democratic candidate for state's attorney, a prosecuting job that in the wrong hands can embarrass City Hall. Both men lost heavily.

For Chicagoans, the Illinois Democratic primary had come to be largely a referendum on Mrs. Byrne. She does not face the voters again until 1983 but has in her first nine months as mayor proved deeply controversial. She could not deliver on her promises to Senator Kennedy, who not only failed to carry the city and all its ethnic minorities against President Carter, but also won only 16 delegates state-wide.

## Harping

Mrs. Byrne had earlier said that the senator end at least count on the vast bulk of the 40 delegates Chicago fields for the national nominating convention.

The Chicago mayor blamed the Press's harping on the Chappaquiddick issue for the failure of the senator to put over his warnings about Mr. Carter's economic policies. In fact, television survey on Tuesday showed that of the few Democratic voters who made up their minds in the 48 hours before the poll, more went for Mr. Kennedy than the President.

This was not enough to save Mr. Kennedy but showed that the President's new counter-inflation measures, which will reduce federal payments to big cities like Chicago has cost him support.

## Trounced

At the local level, the man who did most on Tuesday to derail Mrs. Byrne's Democratic machine was ironically the son of Mr. Richard Daley, the late mayor, from whom Mrs. Byrne inherited the apparatus.

Mrs. Daley the younger soundly trounced Mrs. Byrne's candidate in the primary for the state's attorney post—showing that the Daley name at least still has some pulling power. He is considered a major rival to Mrs. Byrne three years hence.

## Machel warms to private sector

BY BERNARD SIMON IN JOHANNESBURG

MOZAMBIQUE'S Marxist Government appears to have launched a campaign to attract foreign investment and to reassure businessmen that it will allow private enterprise a substantial role in the economy.

President Samora Machel said during a four-hour speech in the capital, Maputo, on Tuesday that the end of the Rhodesian war would enable Mozambique to turn its attention to the reconstruction of its internal economy.

In particular, he criticised the "leftist deviation in the Mozambique revolution" which had led to the state involvement in private enterprise. Mr. Machel singled out the inefficiency of nationalised small businesses and said the quality of their service had dropped below acceptable standards. He announced that the Government intended to return inefficient and corrupt businesses to private ownership.

Mr. Machel also mentioned the country's poor transport system and the declining stan-

dards of hotels. He invited expatriates to return to Mozambique to invest in these and other ventures.

The Government is expected to unveil details of its first 10-year development plan within a few months. According to businessmen recently in Maputo, this will probably give high priority to agricultural development, particularly of basic foodstuffs. The plan apparently aims at an overall annual growth rate of around 15 per cent, funded in part by larger foreign investment inflows.

Inefficiency and corruption among the bureaucracy has been a major problem for foreign investors up to now. The Government appears, however, to be giving high priority to improving the competence of the civil service.

Mr. Machel said on Tuesday that the state apparatus was "sick with parasites" and that those found guilty of corruption would be punished severely.

His remarks came soon after

a visit to Mozambique by about 30 executives of leading multinational companies, including Caterpillar Tractor, Sumitomo, Becthams and Hoechst.

The visit, organised by the U.S. research company, Business International aimed at gauging the Maputo Government's attitude to foreign investment.

According to one of the participants, the authorities indicated that private enterprise would be allowed to continue in certain sectors, in some cases with Government participation. Private interests currently have a stake in one of the country's banks, as well as in the freight forwarding industry and oil and mineral exploration.

The encouragement of foreign investment appears to stem in part from disappointment with the contribution to economic development of Mozambique's close political ties with the Eastern bloc.

The economy has made little progress since independence in mid-1975.

## U.S. seeks reparations from Iran

The U.S. said yesterday that it would press its claims against Iran before the World Court even if the hostages held in Tehran were released.

Reuters reports from The Hague, a State Department legal adviser arguing the U.S. case on the embassy seizure said Washington was asking the court to condemn Iran for breaches of international law and to order Iran to pay reparations in an amount to be determined later. It also asked that the people holding the hostages be prosecuted or extradited to the U.S.

## Singapore prices up

Singapore's consumer price index rose 9.3 per cent to 112.6 (base June, 1977/May, 1978) in February compared with February, 1979, Renter reports. The Department of Statistics said the increase was mainly because of higher food prices.

## More Burmese oil

Burma produced 10.8m barrels of crude oil in 1979, an increase of more than 800,000 barrels over the preceding year, our Rangoon correspondent reports. This was disclosed in a report by the Council of Ministers to the People's National Congress which opened its annual budget session yesterday. The report said the quantity produced would satisfy domestic needs and leave a surplus for stockpiling and export.

## Hong Kong visit

China's Foreign Minister, Huang Hua, arrived in Hong Kong yesterday for an official visit, Renter reports.

## Assam blockade threat deplored

NEW DELHI—Mrs. Indira Gandhi, the Indian Prime Minister, told Parliament yesterday that her Government was opposed to a threat to blockade Assam. The threat has been made by her Congress (I) Party supporters in West Bengal state.

Mrs. Gandhi told a questioner that the Government was trying to get full information on a threat to stop all trucks, freight trains and aircraft leaving West Bengal for north-eastern Assam state on March 24 in retaliation for agitation against Bengalis in the state.

I want to make it very clear that we are not for any step which will increase or aggravate

tension in anyway whatsoever, she said.

Earlier the Congress (I) Party's state leader in West Bengal, Mr. Subrata Mukherjee told reporters in Calcutta that all trucks and freight trains carrying supplies for Assam would be stopped. Aircraft would be prevented from leaving Calcutta's Dum Dum airport.

Mr. Mukherjee said the action, which would be carried out mainly by Congress (I) students and youth wing members, was in retaliation for student-led agitation in Assam against so-called foreigners, including thousands of Bengalis.

The Assamese agitation has been going on for about six months with more than 30 deaths. The movement is aimed at removing from electoral rolls illegal Bangladeshis and Nepali immigrants, and is also against people from West Bengal who have migrated to Assam over the past 30 years.

Talks between Mrs. Gandhi and Assam student leaders broke down last week when the students insisted that any outsider whose name had been included on the Assam electoral rolls since 1951 should be struck off. The government wants the date to be 1971. Reuters

## In pursuit of the elusive Wall Street analyst

BY DAVID LASCELLES IN NEW YORK

"A WALL STREET analyst said... The phrase cropped up again in reports on President Jimmy Carter's anti-inflation package last weekend. It appears in countless business reports from New York. Who are these much-quoted but seldom seen experts, who have a ready comment on most things which go on in corporate America?

According to the Nelson Directory of Securities Research, a thick tome which comes out each year like a Who's Who of the analytical community, some 1,300 people in the U.S. make their living as analysts. Most work for brokerage houses on Wall Street, where they sift mountains of information about everything from the price of broilers to interest rates, and then advise clients on how best to approach the market, whether as borrowers or investors.

One is Mr. Charles Maxwell, vice-chairman of Cyrus J. Lawrence, an old and prestigious investment company which operates from an ornate Gothic building just off Wall Street. Mr. Maxwell ranks among the more prominent

members of his profession for two reasons: he follows the highest industry of all, oil; and he has built a reputation after 12 years in the business as one of the best men in his field.

A dapper, articulate man with thick rimless glasses and a darting sense of humour, he takes a fairly unsentimental view of his profession, seeing it as part of the great Wall Street money-making machine where having the right information at the right time is a large part of the game.

He describes his job as "working out what the stock market expects to happen, and then matching this against what I think or know will happen. If there is a discrepancy, then there's probably an investment opportunity for my clients."

Mr. Maxwell estimates about 10 per cent of his time is spent talking to the oil companies he follows, 30 per cent analysing data and writing reports, and the rest marketing Cyrus J. Lawrence's wares. He makes a point of visiting Europe a couple of times a year, and Japan twice a year. He also makes up to six discussion tapes a year about oil industry prospects, for distribution to clients.



Mr. Charles Maxwell: right information at the right time

In line with the popular view of analysts, he keeps charts to track share prices, although he is not convinced of their value. "People expect me to have charts," he says, "but stocks don't always obey them." He prefers to use his instinct and expertise.

The role of the analyst has changed considerably in the

past 20 years, and the demands on him have become heavier as the market has grown more complex and volatile, he says.

After World War II, stock-holding was still very much "seat of the pants stuff." But the growth in institutional investment and the mounting legal complexity of securities trading in the 1950s created a need for people who could offer investors more soundly based advice.

A new breed of analyst quickly came into its own, and by the 1960s brokerage houses had built up large teams of them as selling points for their services. This, he says, was the "decade of the analyst." They were Wall Street's stars, and were paid accordingly.

But then came the abolition of fixed-rate commissions, and a chill wind swept Wall Street. The huge teams of analysts were whittled down as brokerage houses struggled to contain costs or merged with floundering brethren. At the same time, it became fashionable at banks and financial institutions to have "in-house" analysts or resident experts to form their own opinions about the market. All this left the Wall Street

analytical community leaner although, Mr. Maxwell believes, of higher calibre. "There are fewer analysts today, but more veterans, and they make better analysts."

The other big change is the vogue for following the "technical" of the market (margins, short interest, index trends and so on), rather than "fundamentals," which are forces in the economy and industry which affect earnings, and through them the stock market.

Mr. Maxwell, who is 47, did not start out in life as an analyst. After graduating in political science from Princeton, and in Arabic and Persian from Oxford, he decided to go into the oil business, joining Mobil with which he worked in the UK and Nigeria. "I was fascinated by the oil business, although I don't exactly have crude oil oozing from under my fingernails," he said.

His other passion was the stock market. He first invested money at the age of 10 and never looked back. He was eventually able to combine these two interests when C. J. Lawrence offered him his present job in 1968.

He went to Wall Street just as people were getting excited about oil on the Alaskan North Slope. By dint of some subtle quizzing of the oil companies, he deduced that the oil wells were vastly richer than Wall Street realised. He was thus able to ride the surge in oil share prices when the facts came out a few months later.

There have been fewer dramas since those heady early days. But Mr. Maxwell put out strong "huy" signals when President Carter announced his plan to abolish U.S. oil price controls last year. The surge in oil company earnings and share prices which followed was one of the few bright spots on Wall Street in an otherwise dismal 12 months.

As for the future, he believes the oils may have temporarily run their course as the glamour issues of the market. At the end of February, he quietly began to advise his clients to take some profits and "sell" because most of the foreseeable good news was now reflected in the share price. Those who took his advice can be grateful: oil stocks sank in the first week of March.



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## Mexico decides against GATT

By William Chislett  
in Mexico City

THE MEXICAN President Sr. Jose Lopez Portillo has announced that Mexico would not join the general agreement on Tariffs and Trade (GATT) for the time being.

In deciding not to join GATT, the Mexican President has bowed to nationalist and protectionist pressure groups in the country.

The unexpected decision means that oil-rich Mexico, which is not a member of GATT, has opted not to open up its highly protected economy, but to follow its traditional path of maintaining a system of import licences.

The Government concluded discussions in Geneva with GATT officials last year, and had until May 31 to make up its mind. The Government believed that the terms of its entry, which gave it a 12-year period in which to adapt itself to the GATT rules, were liberal, and the President went out of his way to say this when he made his announcement.

Nevertheless, he said, it was "not the opportune moment" for Mexico to join, adding that the country would carry on its fight for a more just international economic order on a bilateral basis.

Sr. Lopez Portillo's announcement, made at the celebrations to mark the 42nd anniversary of the nationalisation of the Mexican oil industry, was greeted with enthusiastic applause by oil workers, who make up the country's most powerful union.

The Mexican Government viewed GATT membership as part and parcel of the need to make the country's industry more competitive and efficient, and part of its plan to make Mexico more than just an oil-exporting country.

Oil exports in January accounted for \$568.8m of total exports of just over \$1bn.

## Brighter prospects for UK in N. Yemen

By James Buxton, Middle East Correspondent

BRITISH EXPORTS to North Yemen are expected to pick up again following the resolution of a crisis between the two countries over the impounding of a Yemen Airways aircraft at Heathrow last November.

Mr. Abdul-Aziz Abdul-Ghani, the Prime Minister, said here yesterday that relations with Britain were now restored to their normal level. "We will leave the sorry incident to history," he said. Britain and North Yemen had agreed to sign an investment guarantee agreement, he added.

The Yemen Airways aircraft was impounded when it came to collect Mr. Abdul-Ghani after a successful official visit to London. British Midland Airways had obtained a High Court order on account of an alleged unpaid debt to the British airline from Yemen Airways.

The crisis was partially defused when the aircraft was released on January 17 after 47

days following the posting of a bond by the British Government against a North Yemeni Government guarantee. But the bad feeling over the apparent insult to the North Yemeni Government persisted. Though there was no formal embargo, importers of British goods found it hard to obtain import licences and trade slowed.

Finally Britain sent Mr. Hurd, Minister of State at the Foreign Office, to Sana'a to make a formal apology over the incident earlier this month. North Yemen wants British companies to become more involved with Yemeni private sector companies in development projects, the Prime Minister said.

North Yemen has investment guarantee agreements of the kind it wants to sign with Britain with the U.S. and West Germany.

British exports to North Yemen amounted to £49.2m in 1979, a marginal rise of 1 per cent over the previous year.

## Indonesia plans to double LNG capacity

By Richard Cowper in Jakarta

INDONESIA HOPES to complete negotiations soon on three major liquefied natural gas (LNG) expansion projects which would more than double the country's LNG capacity by 1984-85.

If all goes well, Indonesia's state-owned oil company, plans to start work this year on seven new LNG trains (processing unit) in North Sumatra and East Kalimantan. The trains are likely to cost about \$2.4bn (£1.09bn).

If the three separate projects go ahead this year, Indonesia could well be producing about 18.3m tonnes of LNG by 1984-85.

Officials at Pertamina are expecting to announce within the next two weeks an agreement with JILCO, the Japanese consortium of LNG buyers to add two new trains at Bontang in East Kalimantan in which JILCO already has a stake.

The plant, which is likely to cost about \$700m, would increase Bontang's capacity from about 3.7m tonnes per annum to 6.3m tonnes.

Financing is expected to be provided by a Japanese syndicated loan led by Export-Import Bank of Japan.

Also under negotiation is a further two train expansion at Arun in North Sumatra, also involving an investment of

about \$700m. This expansion would boost the Arun facility's capacity from 4.7m tonnes a year to about 7.9m tonnes. Finance is likely to come from a number of Japanese commercial banks associated with the Mitsubishi group since the project would involve Tokyo Electric with whom Pertamina has also signed an LNG supply deal.

The third expansion plan for a further three trains at Arun, which would boost its capacity to 12m tonnes a year, has been under negotiation with Pacific Lighting of the U.S. since 1973. But the proposal ran into problems associated with changing priorities in U.S. energy policy so that the principal hurdles were not overcome until the end of last year. It is now hoped that final agreement will be reached by August this year.

Pertamina planned three-train expansion of Arun is now likely to cost in the region of \$1bn. Under an agreement with Pertamina, Pacific is obliged to arrange the financing.

Indonesia, which produced about 6.3m tonnes of LNG in 1978, aims to boost the output to 8.4m tonnes this year. It should see 1979 earnings of \$1.2bn in 1979 rise to \$2.8bn in 1980.

## White House opposed to restrictions on Japan cars

WASHINGTON—The Carter Administration is opposed to proposals that Japan be pressured to reduce its car sales in the U.S. as a way to help the sagging U.S. motor industry.

Mr. Reubin Askew, the U.S. Trade Representative, told a House of Representatives Ways and Means trade sub-committee that such restrictions would undermine new laws intended to lower international trade barriers and would limit the availability of high-mileage cars.

"Import restrictions would cause higher average prices for automobiles and increase fuel

consumption at a time when reducing inflation and promoting energy conservation are paramount national objectives," he said.

Earlier this month, Mr. Charles Vanik, the sub-committee's chairman, warned Japanese car-makers that unless they roll back their U.S. car sales to 1977 levels, Congress would set to protect the U.S. auto industry.

Mr. Askew and others criticised European countries for imposing various restrictions of their own on car imports from Japan.

"One reason why the

Japanese are exporting so many cars to the U.S. is because they often are unable to export them elsewhere," he said. "Other nations, particularly Europe, place restrictions on the volume of Japanese imports. Often these restrictions are simply 'gentlemen's agreements'—unwritten and unannounced barriers to trade which have devastating effects on third parties such as the U.S."

Mr. Vanik agreed, adding that he has been informed that Italy, France and Britain all have re-

stricted the importing of Japanese cars, but that West Germany does not.

Mr. Robert Hornsby, the deputy U.S. Trade Negotiator, also was sharply critical of European auto import restrictions. He said that some European countries have arranged "under the table restrictions."

He said that the European restrictions violate the "spirit or the letter" of the General Agreement on Tariffs and Trade (GATT), and that the U.S. should oppose such restrictions abroad, rather than copying them.

While opposing proposals to

restrict the importing of Japanese cars, Mr. Askew said the Administration has urged Japanese companies to increase their investments in auto-producing facilities in the U.S.

"Such investment in production and assembly for the U.S. market would have the dual advantage of creating jobs for American workers without reducing the numbers of small, fuel-efficient cars available to American consumers," he said.

Toyota and Nissan have resisted pressure to open plants in the U.S., but Honda has announced plans to build a

plant in Ohio. Toyota and Nissan yesterday welcomed U.S. opposition to restricting Japanese auto imports as "sensible and level-headed."

"We consider Askew's statement sensible," said Mr. Masataka Okuma, Nissan's executive vice-president for export and overseas operations. "We realise that the good sales of Japanese cars in the U.S. are a transient phenomenon which will last only until American automakers' small car production starts on a full scale," he said.—AP

## Australia in Saudi Arabia pact

By Patricia Newby in Canberra

MR. DOUG ANTHONY, Australia's deputy Prime Minister and Minister for Trade and Resources, will sign a trade agreement with Saudi Arabia in Riyadh on Sunday during a two-week visit to the Middle East.

Mr. Anthony is leading a delegation to the area as part of a major thrust by Australia to increase trade with the Middle East, particularly in food, fibres, minerals and technical expertise.

The delegation includes the chairman of the Australian Wheat Board, the Australian Meat and Livestock Corporation, the Dairy Products Manufacturers' Federation, the Institute

of Mining and Metallurgy, the Institute of Agricultural Science and senior representatives of industry and banking as well as top-level Government officials.

Saudi Arabia is one of the few countries with which Australia has a negative trade balance, exports from Australia last year were worth \$4126m (£633m)—way below the level the Australians believe can be achieved.

The main products were wheat, live sheep, meat, other foodstuffs, fibres, machinery including cranes and elevators, and raw and processed metals including iron and steel, copper and aluminium.

Imports, almost entirely oil, were worth more than \$4400m. Australia would like to develop bigger markets in the Middle East for minerals, especially alumina, to take advantage of Australia's bauxite deposits and cheap coal to fuel processing.

Australia already supplies the alumina requirements of aluminium refineries in Bahrain and Dubai.

In Jeddah, Mr. Anthony will attend an Australian trade fair where 60 Australian companies are displaying their products. The delegation will go from Saudi Arabia to the United Arab Emirates, Qatar and Oman.

## Ford in Manila Mazda deal

By Leo Gonzaga in Manila

THE REVIEW Committee of the Government-sponsored Progressive Car Manufacturing Programme (PCMP) has given Ford Philippines permission to assemble the Mazda model of Toyo Kogyo (Japan), which has a tie-up with Ford's U.S. parent. But Ford Philippines will have to phase out one of the three models it is already assembling under the PCMP, as the committee is against a proliferation of models and allows only a change from one model to another.

The local Ford has indicated that it will retain the Cortina and Granada, but is willing to sacrifice the Escort which is in

the category of the Mazda. Ford Philippines needs a fast seller because, among the five programme participants, it is only third in local market share.

The tallender, DMG, which assembles the Beetle, Passat and Brasilia models of Germany's Volkswagenwerke, is seeking permission of the review committee to assemble Datsun cars, even if it means abandoning the Beetle. The company's market share has shrunk to such a size that it is operating at only 50 per cent of capacity and, last week, applied to the Labour Ministry for authority to lay off 271 employees and supervisors.

If the company's request is approved by the review committee, the only non-Japanese models in PCMP, apart from the Passat and the Brasilia will be the Opel (Rekord and Mania), which is German and being assembled by Filipinas GM (General Motors). GM also assembles the Japanese model Gemini. Car Company (formerly Chrysler) turns out different Mitsubishi models, while the industry's leader, Delta Motor, produces various Toyotas (Crown, Corona and Corolla).

Last month, out of 4,676 cars sold by the five programme companies, Delta accounted for 2,066 or 44.2 per cent.

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## UK NEWS

# Philips reorganises British operations

BY GUY DE JONQUIERES

THE DUTCH Philips group has reorganised its UK operations as part of a strategy to strengthen its position as a leading supplier of electronic office products.

Four of its British operations—Pye TMC, Philips Data Systems, Pye Business Communications and Philips Business Equipment—have been merged to form Philips Business Systems, the group said yesterday.

Similar reorganisation in other countries is expected to follow. The move is to unify development and marketing in the face of increasingly tough international competition.

The office is expected to be one of the fastest growing markets for electronic products in the next decade. It will bring together techniques in data-processing, telecommunications and business equipment.

Mr. Brian Manley, managing director of Philips Business Systems, said Philips offered one of the broadest product ranges and could meet the

needs of both small and large businesses.

The company is particularly strong in dictating equipment, small business computers and private telephone exchanges. It also manufactures a word-processor, telephone receivers and public address systems, but does not at present market facsimile machines or copiers.

Philips plans to launch new internal communications systems and dictating machines later this year and to expand its range of word-processing equipment.

Mr. Manley forecast that the UK office systems market would grow from about £500m this year to £800m in 1984. He expected Philips share to double to £200m in the same period. At least half the new company's products would be made in Britain.

He said that initially there would be strong growth of products intended for use on their own, but equipped to communicate with other machines. In the second phase, separate

pieces of equipment would be integrated into complete systems able to handle voice, text and data.

Philips also said it had decided not to proceed with plans to develop in the UK a private business videodata system for displaying computer-generated information on television screens.

Extensive market research in the past 18 months had suggested the market would be quite small and could be satisfied by the Post Office's Prestel service. But Philips will continue with such systems in other European countries and manufacture of Prestel sets in the UK.

Such systems are being developed by several other manufacturers, including the General Electric Company (GEC). One was launched earlier this year by Argon, a National Enterprise Board subsidiary established to market British videodata technology and products overseas.

# Meriden hope for Suzuki rescue

By John Elliott, Industrial Editor

LEADERS OF Meriden workers' co-operative hope that Marubeni, the Japanese trading house, will mount a two-stage rescue of their motor-cycle business with the help of Suzuki.

The first stage would involve extending the range of the co-op's Triumph bikes, limited to a 750 cc model, into smaller sizes.

Up to about 60 per cent of the bikes would be made up of Suzuki parts imported from Japan, but the Triumph name would be retained.

Later, Meriden would hope to assemble complete Suzuki motor-cycles as a separate operation in another part of its factory near Coventry.

But any such rescue is likely to need approval by the Heron Motor Corporation, whose Heron Suzuki subsidiary is sole importer of Suzuki bikes to the UK and Ireland.

Mr. Gerald Ronson, chairman of Heron, said yesterday that his company imported 75,000 Suzuki motor-bikes a year. He indicated that Marubeni and Meriden might run into problems if a deal went forward.

He said Heron was perfectly capable of setting up a manufacturing operation itself in the UK if it wanted to do so, without needing the help of a Japanese trading house. He had had discussions with Mr. Geoffrey Robinson, the Coventry Labour MP who is the co-operative's chief executive, some time ago.

"They could not make bikes in this country under the Suzuki brand name without the approval of Suzuki in Japan, and of us as the distributors," he said.

In Tokyo yesterday Marubeni confirmed that it is trying to mount a rescue. But Suzuki said it had not been in touch with either Marubeni or Meriden for the "telling" of the co-operative. It is known, however, that Marubeni and Suzuki are examining the possibility of a deal.

# Oil explorers seek more incentives

BY RAY DAFTER, ENERGY EDITOR

NORTH SEA oil operations have called for "major changes" in the Government's offshore policies.

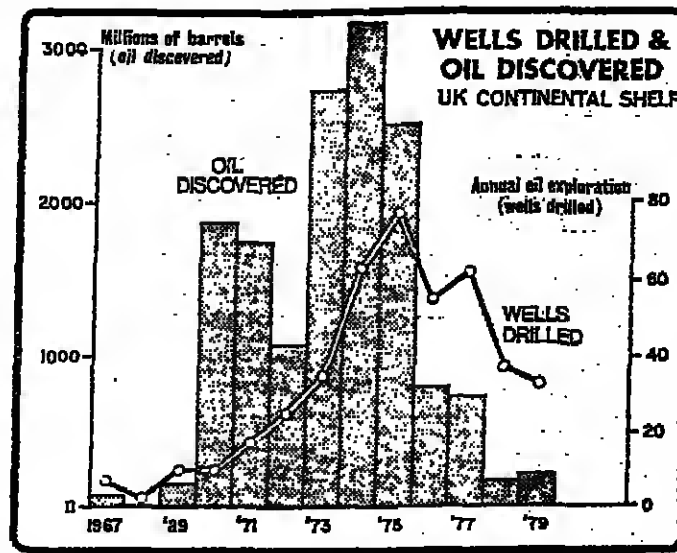
The companies, including British Petroleum, Shell and the State-owned British National Oil Corporation, said yesterday the changes were urgently needed to raise the level of oil and gas exploration.

Their representative body, the UK Offshore Operators' Association, warned of a serious oil supply shortage in the 1990s unless exploration was soon raised to between two and three times the 1979 level.

"Now is the time the Government should be providing the opportunity and stable operating conditions that will enable the industry to find and develop sufficient new reserves and to continue UK oil self-sufficiency into the 1990s and beyond," the association said.

The message is remarkable in that it is aimed at a Conservative Government which has pledged itself to giving the oil industry greater freedom of operation and more incentives to exploration. The call for a change of Government direction will embarrass both the Energy Department and Mr. David Howell, the Energy Secretary, in particular.

The association said the number of exploration wells drilled



had been declining seriously even though fields were becoming harder to find. Only 33 oil exploration wells were drilled last year so a number of rigs had left UK waters.

Fewer than half of the 65 to 80 exploration wells forecast by the industry as necessary for UK energy self-sufficiency in the 1990s are being drilled. The association warned that unless action was taken self-sufficiency would be short-lived and the forecast surplus oil production in the 1980s would be equal to

only one year's UK consumption.

The Government should adopt policies that would "establish a climate of confidence for the industry to make the mammoth exploration effort needed."

Future investment should be several times the £15bn spent in the UK sector of the North Sea so far.

The association asked for:

- More exploration licences. It said the Seventh Round of licences, with 70 blocks, was too small, and it warned that delays

# Benefits payment switch 'would shut 2,000 sub post offices'

BY JOHN LLOYD

THE POST OFFICE yesterday poured cold water on proposals that welfare benefits now paid over post office counters should be paid less frequently and directly into bank accounts.

At the same time Sir William Barlow, Post Office chairman, said he was hopeful the Government would soon amend the Post Office Act to allow post offices to act as agencies for nationalised industries and statutory bodies.

The proposals to cut the frequency of welfare payments and to change their method of payment have been mooted in recent months by Sir Derek Rayner, who has been charged by the Prime Minister to make economies in public expenditure.

But the Post Office said these economies would probably result in the closure of some 2,000 sub post offices, out of a present total of more than 31,000 and the sacking of 2,000 full time staff.

Sir William told the select committee on social services that to make payments to the 10m people who receive welfare benefits by bank transfer would mean opening 10m Girobank accounts all at once, which would be practically impossible.

Mr. Sam Wainwright, managing director of Girobank, told the committee that the cost of making the transactions through the bank would be bigger than the present system.

Mr. Dennis Roberts, managing director of posts, said the proportion of those claiming

who drew weekly family allowances had gone up sharply from 24 per cent in 1973 to 34 per cent in 1979.

The annual cost of running the Post Office's counter business is £359m, of which the Department of Health and Social Security pays £135m as a fee for Post Office's services.

The Post Office Act presently does not allow the corporation to provide services for nationalised industries and only permits it to act for local authorities under certain conditions.

Sir William said he hoped a change in the Act might be incorporated in the legislation to split the Post Office into two authorities which will come before Parliament later this year.

# Electricity pension trustees to meet over suspensions

BY CHRISTINE MOIR

A FULL meeting of the board of trustees of the Electricity Council's £1.3bn pension funds has been called for Friday to discuss the investigations which have led to the suspension of Mr. Alan Urwin and Mr. William Lund from their positions as investment managers.

On Tuesday the special investment sub-committee of the trustee board was told by Mr. Austin Bunch, deputy chairman of the Electricity Council and the chairman of the trustees, why he suspended the two men on March 3. Mr. Urwin and Mr. Lund were not asked to attend the meeting.

Mr. Bunch decided to

suspend the men after sending the Metropolitan Police Fraud squad a copy of a specially commissioned report by accountants Cork Gully into Westmoreland Investments, one of the funds' many property investments.

The full Cork Gully report was apparently not made available to the investment sub-committee who were simply told of its possible implications. It is not known whether the trustees will be given a copy at their full meeting.

Yesterday the Electricity Council refused to answer any queries about the affair and would not even confirm the sub-

committee meeting notice which had been posted in the Council's building.

Meanwhile, unless the trustees reverse Mr. Bunch's decision the two men are likely to remain suspended from their positions for several months, at least.

Police investigations are thought not to have started yet, but momentum has already built up. Now that the affair has been drawn to the police's attention normal procedure is for initial investigations to be followed by a report to the Director of Public Prosecutions. The DPP then decides whether to proceed further, a procedure which normally takes several months.

# Casino plan for Hilton Hotel

By Andrew Fisher

GRAND METROPOLITAN, the major UK hotel, drinks and leisure group, hope to open its first London casino in the Hilton Hotel next year, although it still needs formal court approval.

The Gaming Board, which granted the company a certificate of consent to operate a casino in the hotel, which is in the expensive Mayfair district.

Through its Mecca division, Grand Metropolitan runs four casinos in the West End—the latest is in the Ritz Hotel in Piccadilly—as well as three on board luxury Cunard liners.

To open a club in the Hilton the company has to gain the consent of the licensing justices at the South Westminster Magistrates' Court in May, when other operators can make objections. It also needs planning permission.

The Hilton management said yesterday it had an agreement with Mecca, though nothing had been settled. Norwich Enterprises, from which Playboy bought the Victoria Sporting Club last year for £6m, once had plans to run a club at the Hilton, and Ladbroke was also interested.

News of Grand Metropolitan's proposed move into the Hilton comes just after the intended resignation, announced last week of Mr. Ernest Sharp, the joint managing director whose responsibilities include Mecca.

It is understood that the company has also been granted another consent certificate by the Gaming Board. It has applied for four new licences altogether, partly as a protective move to prevent other potential club operators from entering the market.

Grand Metropolitan's betting and gaming activities last year accounted for just under 9 per cent of trading profits of £147.5m, and the company has indicated that it wants to keep the proportion within controllable limits.

Last week Mr. Sharp said his resignation was not a consequence of any policy disagreements with his board colleagues—"there has been no acrimony, no great row."



MR. ROGER HURN, 41, managing director of Smiths Industries, was yesterday presented the Guardian's Young Businessman of the Year award by Mr. Gordon Richardson, Governor of the Bank of England.

The award was made to Mr. Hurn because "he has played an important part in helping to foster the growth of a broadly based group," said judges.

Mr. Richardson handed over the trophy, the tenth time it has been awarded, at a lunch at Mansion House, London.

# Radon gas scare shuts tin mine

Financial Times Reporter

WORK stopped yesterday at South Crofty, the biggest of the Cornish tin mines, because of a radioactivity scare.

The miners spent all day in a meeting, while Transport and General Workers Union representatives discussed with local management their demand for urgent steps to counteract what was claimed to be a dangerous level of radon gas.

Radon gas comes from trace elements in granite, and causes the radioactivity which is present in all Cornish tin mines. The miners want a general issue of free flow air helmets, and have rejected management's suggestion that they should wear face masks because of the heat and humidity in the mine.

But Mr. Malcolm Stone, chairman of Saint Piran, the group which controls South Crofty, said yesterday the helmets, which have a fan in the back, are designed essentially for dust prevention, and do not appear to be suitable against radon gas.

The radon gas problem is acknowledged by both union and management. "It has probably been made worse recently by gas coming from other workings nearby," said Mr. John Foster, the TGWU district secretary.

Discussions were held with the union about a year ago, and the company came up with a plan to improve ventilation, said Mr. Stone. Everybody appeared to have been satisfied. The strike had been called without notice.

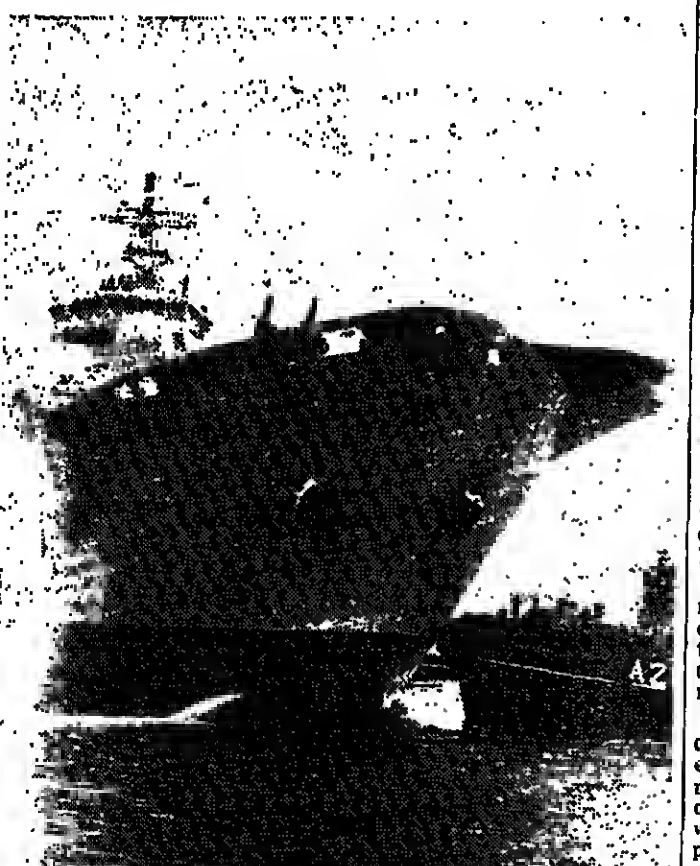
# Japanese gain £7m contract for pipeline

A £7m British Petroleum contract for North Sea pipeline has been awarded to a Japanese steelmaker because the British Steel Corporation could not supply the right quality steel pipe.

The order, for 20,000 tons of large diameter pipe, went to Nippon Kokan Kaisha in preference to BSC and other European steel industries. The Japanese gave the right assurances about delivery due to start in July. But the principal reason was the quality of its "high chemistry" pipeline capable of carrying heavy sulphur crude.

Japanese yards supplied other oil companies with similar grades of pipe, BP said.

The order of pipe for the Magnus Field, was awarded last December, leading to suggestions that the impending national steel strike might have influenced BP's decision. BP yesterday denied these suggestions.



HMS Invincible, the first of the Royal Navy's anti-submarine cruisers and the largest warship to be built for the Navy for 25 years, accepted into service at Portsmouth yesterday.

# Few jobs for pilots

BY MICHAEL DONNE, AEROSPACE CORRESPONDENT

THERE ARE too many airline pilots in the UK, and job prospects for qualified pilots in the immediate future are "very poor," a conference at Oxford was told yesterday.

The conference, organised by the Oxford Air Training School, was designed to outline job prospects to potential pilots and servicemen leaving the armed forces.

The surplus is the result of the failure of British Cargo Airlines and Air Kent, which have stopped flying, and a lack of recruitment by most operators, airline representatives said.

Only helicopter operators are still actively recruiting, with vacancies for a small number of qualified pilots at Bristow Helicopters. But one bright spot is

that Britannia Airways, the holiday charter airline, may need as many as 70 more pilots over the next year.

British Caledonian, Laker Airways and British Airways need no new pilots this year. While some job opportunities exist in general aviation, involving smaller, lighter aircraft, the pay is much less.

The captain of a Boeing 727 jet can earn up to £17,000 a year, but pay for a general aviation pilot ranges between £8,000 and £14,000 a year.

There are about 7,000 professional airline pilots in the UK, of whom about 3,500 work for British Airways.

The complete turn-round in the situation has been largely due to sharp changes in airlines' economic fortunes.

# Rowntree to cut staff

ROWNTREE MACKINTOSH

to reduce the level of stocks. Rowntree has already placed about 5,000 workers at Halifax and Castleford on short time working for the past several weeks.

Rowntree blames the fall in demand on the increase in VAT, the lingering effects of last year's road haulage dispute and the general downturn in the economy.

# Radiation harm-in cash terms

By David Fishlock, Science Editor

COST-BENEFIT analysis can help government determine safe limits for public exposure to radiation from the nuclear industry, the government's watchdog on radiation has concluded.

The National Radiological Protection Board, in a discussion document published today, shows the use of cost-benefit analysis to justify official limits for radiation exposure.

It sets out a method of valuation which takes account of the collective risk to society and to individuals.

However, the board's argument makes it plain that the decisions involved are not of the kind it could take in isolation, but are essentially government decisions.

The technique proposed requires the harm from radiation exposure to be converted into monetary terms. Then, the costs of protection can be compared with the costs of radiation exposure. Its consequence is to channel resources towards those exposed to the highest doses of radiation.

Origin

The argument originates in the 1977 recommendations of the International Commission on Radiological Protection, a committee of radiation specialists and doctors on whose advice most governments depend.

Those recommendations propose that all exposures should be kept "as low as reasonably achievable." This was a formula adopted in the U.S. in the early 1970s to help decide how far to go in stipulating tighter controls over radioactive emissions from nuclear reactors.

The commission recommended governments to make their own cost-benefit analyses based on their own situations.

British efforts to quantify risk in this way were initiated by Mr. John Dunster, formerly with the National Radiological Protection Board but now the government's director of nuclear safety. Mr. Dunster has said recently that "one has only to estimate a risk these days to be told that it is too high."

He believes that risk assessment today is a compulsory rather than an optional part of decision-making. Initially, it makes decisions harder to reach but, in time, "it should give more confidence that decisions are being taken in a consistent and possibly even in a logical way."

The application of cost-benefit analysis to the radiological protection of the public: a consultative document. HMSO, £2.00.

# Import controls 'may be needed'

BY MAURICE SAMUELSON

A DEGREE of control over the volume of imports was suggested yesterday by Sir Charles Villiers, chairman of British Steel Corporation.

He blamed the strength of sterling for some of the corporation's heavy losses. If the value of the pound could not be reduced substantially, a regular increase in imports should be allowed "in an orderly manner, without swamping British industry."

Sir Charles told the Federation of British Cutlery Manufacturers in Sheffield the objective must be "to compensate for the petrocurency while maintaining as far as possible the principle of free trade."

"We just cannot go on being screwed by this combination of a petrocurency with inflation which is tramping our heavy industries into the ground. Industrial survival is at stake."

# Ulster talks on constitution nearly over

THE constitutional conference on Northern Ireland, which aims to find ways of devolving more political power to the province, will probably be adjourned in its present form at Easter, when the three political parties attending should have completed the 14-point agenda.

Although the conference appears to have achieved little substantive progress because Mr. Ian Paisley, the main Unionist delegate has refused to yield on the question of power-sharing, Mr. Humphrey Atkins, Secretary of State, has always maintained that the talks were primarily exploratory.

Mr. Atkins is expected to recommend to the Government either that it should draw up proposals of its own for devolution or try to continue investigations.

Mr. John Hume, SDLP leader and the main Catholic representative, feels the conference has reached the end of its usefulness. He favours a more high-powered conference involving Mrs. Margaret Thatcher, Prime Minister, and the Irish Premier, Mr. Charles Haughey.

# Gas bill slide rule reissued

A FREE slide-rule called "Gus" issued three years ago by the National Gas Consumers Council to help consumers forecast and control their bills, is to be relaunched with updated prices. The NGCC says the rule encourages energy saving.

# Aerosols from abroad

BY MAURICE SAMUELSON

LACK OF TINPLATE caused by the steel strike is forcing Aerosols International to buy up to 5m aerosol cans in Europe. That is equivalent to the company's normal monthly output, which is now down to "a few hundred thousand," said Mr. George Hodgson, the marketing director.

"The steel strike has hit us very hard in terms of reduced production and sales since the

beginning of the year," he said.

When the strike ends, production would take months to return to normal, and that is when the imported cans, bought at a premium, would be used.

More than a third of the company's business is exported. The lost exports, together with greater imports, would have a permanent effect on the industry, Mr. Hodgson said.

# Accountants emphasise value of good records

THE IMPORTANCE of keeping up-to-date business records is outlined in a booklet published today by the Institute of Chartered Accountants in England and Wales.

The booklet, the latest in the series Notes for Businessmen, describes some of the records which an accountant can help a businessman to set up.

It explains how the accounting records that must be kept for tax purposes can be used to pro-

vide information for the effective running of a business.

Adequate records, says the booklet, can enable a company accountant to reduce the tax liability of a business by planning ahead. He would not have to wait for the preparation of annual accounts.

Other aspects of record keeping covered include cost, cash and staff control.

Keeping the Records by J. Clare.

# Record bids are made for Koekoek paintings

TWO PAINTINGS by the Dutch artist Barend Koekoek sold for £70,000 each at Sotheby's auction of 19th century Continental pictures yesterday. The Rhineland scenes easily beat the previous record for the artist of £47,667 which was paid in 1976.

The Fine Art Society bought Figures by Fishing Boats, by Andreas Schelfhout, for £38,000, and The Noorddekerke, Amsterdam, by Cornelis Springer sold for £34,000. The Berlin Museum, bidding through a telephone link in Sotheby's Munich office, paid £27,000 for a view of Potsdam, by Carl Hasenpflug.

Sotheby's first sale of bonds and old securities was disappointing because the major item, a Chinese bond of the early 20th century, was bought in at £6,000, showing that the sharp rise in prices in this sector is easing off. Items from the English provincial banks did well, however.

Miniatures did well at Christie's. One of Louis XIV. by Jean Petitot, sold for £10,000, as did an 1825 figure of George Washington, by Henry Bone, after Gilbert Stuart. The same sum secured a miniature entitled The Swing, catalogued as by Fragonard. This had previously appeared at Christie's.

# SALEROOM

BY ANTONY THORNCROFT

in 1935 when it made £89.5s. (£89.25).

S. J. Phillips, the London dealer, secured a Louis XV rectangular gold and enamelled box, made in Paris in 1763, for £20,000, while in a sale of sporting guns a pair of Purdey 12-bore side-ejector guns, completed in 1977, went for £22,000. They have never been used.



## Air insurers suffer their worst year

BY MICHAEL DONNE, AEROSPACE CORRESPONDENT

THE UK aerospace insurance market had its worst year last year, with total outlays approaching \$550m (over £182m).

Aircraft losses included \$210m on 19 Western-built jet airliners that were either destroyed in accidents or damaged beyond repair, and substantial partial losses of \$54m, of which \$30m was accounted for by damage to three Boeing 747 Jumbo jets.

In addition, there were some "disastrous" losses amounting to about \$91m in satellite insurance.

Moreover, in some areas, such as the American Airlines' DC-10 accident at Chicago in May, the potential liability to the world aviation insurance market has yet to be fully determined.

Commenting, Mr. Jack Webb, chairman of the UK Aviation Insurance Association, said in his annual report that taken together these losses suggested that the underwriting prospects for the year "must be considered to be very bleak".

Mr. Webb said that 1979 is likely to be remembered as the "year of the DC-10", no fewer than three of these aircraft being totally destroyed.

Total passenger fatalities in all aircraft accidents last year rose from 663 to 880; crew-member fatalities rose from 54 to 92.

Mr. Webb said that during 1979 severe contraction in the number of broker or agency-controlled underwriting facilities in the U.S. resulted in more general aviation business being offered to the London market.

As a result, there was an increase in rating levels, but there was still room for further improvement.

Mr. Webb, aviation underwriter of the Andrew Weir Insurance Company, has been re-elected chairman of the Aviation Insurance Offices Association.

Mr. J. J. Purdie, aviation underwriter of English and American Insurance, has been re-elected deputy chairman of the association.

Other association appointments include Mr. C. G. Jessup, aviation underwriter of Guardian Royal Exchange Assurance Group, as honorary secretary and treasurer. He succeeds Mr. R. F. Dowlen, group aviation underwriter of Commercial Union Assurance, who held the post for seven years.

THE DISPUTE between British Aluminium and the North of Scotland Hydro Electric Board (NSHEB), some details of which were made public by the company yesterday, has its origins in the decision by the Labour Government in 1967-68 to encourage the establishment of aluminium smelters in the UK.

The smelters were seen as import-saving and to a lesser extent job-creating projects. They were also very much in tune with the Government's enthusiasm for high-technology industries.

The idea was that the smelters would be provided with electricity at a cost which, together with the rest of the financial arrangements, would enable them to produce aluminium at an internationally competitive price.

In the case of British Aluminium, at Invergordon, on the Moray Firth, and the RTZ consortium in Anglesey, this electricity was to come from nuclear power stations—Hunterston B and Dungeness B—based on the British AGR (Advanced Gas-cooled Reactor) design.

The third smelter, that of Alcan at Lynemouth, in Northumberland, was tied to a coal-fired station; a special price for the coal was negotiated with the National Coal Board.

The expectation was that the cost of this electricity would be stable in real terms, so that

smelters based on nuclear power would be competitive with smelters based on hydro-electric power, on which more than half the world's primary aluminium production depends.

The price at which British Aluminium was supplied with power has never been disclosed. It is thought to have been somewhat higher than the current price in the U.S. at the time. When investment grants, covering 40 per cent of the capital cost of the smelter, were taken into account, the financial conditions were roughly similar to those an American company would have faced.

The essential element in the deal was that the smelter would provide the power station with an assured base load for a substantial part of its output.

At the time the contracts were announced in 1968 the chairman of NSHEB commented that the electricity price was "pretty much a one-off job," since few customers were likely to match the conditions provided by the Invergordon smelter—200mW of base load electricity 24 hours a day.

The financing arrangements, in which Mr. Harold (now Lord) Lever played an active part, were novel, because the industrial tariffs of the generating boards did not make provision for the long-term contracts normal in the international aluminium industry.

First, British Aluminium

made a contribution to the capital costs of Hunterston B. This was calculated as 20 per cent of the total cost, allowing for the anticipated load factor and average availability, and the price was £24m.

The Government then agreed to lend British Aluminium £24m at 7 per cent, which was the going rate of interest on Public Works Loan Board loans. The company had to repay the capital and interest in equal annual instalments up to the year 2000.

Second, the company agreed to pay 20 per cent of the running costs of Hunterston B, based on the efficient working of the station, but subject to escalation of fuel and operating costs.

British Aluminium's contract is with NSHEB, even though Hunterston B was built and operated by the South of Scotland Electricity Board (SSEB). There is a separate agreement between the two boards, whereby a tranche of the capital costs of the station and the running costs appropriate to that tranche are allocated to NSHEB.

Construction of Hunterston B, a 1,250mW station, began in 1967, but the first unit did not start supplying electricity until 1976 and the second unit in 1977. Capital costs were higher than expected and British Aluminium's contribution had to be increased. The enabling Bill had permitted the Government to increase the loan from

£24m to £30m and this was

done. In 1978 a further loan of £7m was granted, this time at 14 per cent.

Even more serious were the technical problems at Hunterston, which meant that the station could not reach planned output levels. The Government decided that the extra costs arising from the de-rating of the station could not be charged to British Aluminium under the terms of the contract, but that it would reimburse NSHEB.

In addition, the Government reimbursed NSHEB for the extra costs of supplying the smelter from less efficient coal-fired stations for a longer period and in larger amounts than had been assumed in the contract—the original plan had envisaged a switch to nuclear power in April 1973.

The Government's payments to NSHEB started in 1976 and have continued, with the approval of Parliament, in subsequent years.

A further setback occurred in October 1977 when the second of the two reactors was put out of action by an ingress of sea water. For more than two years this reactor was unable to supply power, so that the NSHEB had to obtain electricity for the smelter from other sources. Again, the tab was picked up by the Government, in order to prevent the burden falling on the board's other customers.

The Government's compensation, however, by no means

covered the whole of the bill arising from the delays and difficulties at Hunterston B. NSHEB believes that, under the terms of the contract, some of the additional costs should be borne by the company.

The disagreement between the two sides over the interpretation of the contract goes back several years, but up to March 1976, the amounts of money were small and the differences were resolved by negotiation. Since then attempts to negotiate a settlement have been unsuccessful and the matter is now likely to be decided in the courts.

Because of possible legal action, the company is not revealing full details of the issues in contention. But yesterday's statement makes clear that the amounts of money involved are large.

Although the company does not accept liability for any of the disputed charges, it has made full provision for them in the accounts.

Creditors at December 31 include £18.4m (compared with £10m at the end of 1978) for disputed revenue and capital charges plus provisions where appropriate for interest on payments withheld. If the courts find in the company's favour in all the matters in dispute, the net effect as of December 31, 1979, would be an increase in pre-tax profits of £10.7m, of which £6m relates to 1979 and the balance to earlier years.

One of the matters in dispute is the repair bill for the water leak, where the board is demanding that the company contribute to the costs. The largest sums of money on the interpretation of escalation clauses in the contract.

For example, fuel prices have gone up sharply, partly because world uranium prices have risen but partly because British Nuclear Fuels, which has been operating below capacity, has had to charge higher prices.

Are these higher prices stemming partly from the downturn in the British nuclear programme and difficulties with the AGR stations, covered by the escalation clauses in the contract with British Aluminium?

Underlying the argument about escalation is the question of whether British Aluminium, by virtue of its per cent contribution to capital and running costs of Hunterston B, is obliged to share in the subsequent fortunes of the station.

The company argues that no sense is it an equity partner in the project. If it had been it would have insisted on a share in the management. The company says it specifically ruled out an equity share because it had no competence in nuclear events. It had a contract which clearly defined responsibilities.

### CONTRACTS

## £3.2m railway order for Balfour Beatty

BALFOUR BEATTY Southern construction division has been awarded a £3.2m contract by British Rail London Midland Region, for 7.5km of railway trackwork and associated overhead line equipment bases, together with an extension to the traction maintenance depot.

An order for 40 trucks worth £1.5m has been won by SCANGHEL, specialist vehicle manufacturer within Leyland Vehicles. It was placed by the Sudan Shipping Line for its road transport company, Transudan, which is managed by Redcliffe International (UK). Designed for operation at up to 65 tons gvw, the Crusader units will be used to transport ISO containers and general cargo from Port Sudan to Khartoum—a distance of 300 miles of which 100 miles is off road.

For the new plant being built at Worthington, Cumbria, Thames Board Mills has placed orders with BABCOCK POWELL for an 80 tonnes of steam an hour boiler worth £1m; with BROCKHOUSE WARWICK SECTIONS for a cable support system worth £100,000; and with CFC (UNITED KINGDOM) for a starch conversion system.

A £647,669 contract with the City of Glasgow District Council for the construction of a computer centre within an existing building, previously used as a factory, at 112 Ingram Street, Glasgow, has been won by COSTAIN CONSTRUCTION.

The British Sugar Corporation has signed a £800,000 contract

for the use of a fleet of 15 tanker lorries made in Holland. The 20-ton vehicles will be provided and operated by JOHN W. TAYLOR (ALLSWORTH), a Peterborough haulage firm, but they will all carry the corporation's name.

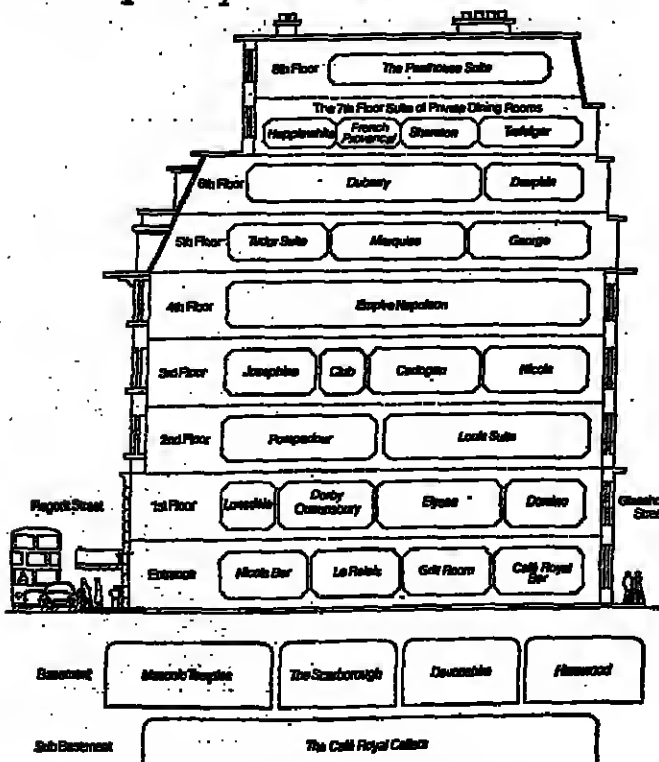
Mozambique has ordered through the Crown Agents, over £500,000 worth of payphones and ancillary equipment from GEC TELECOMMUNICATIONS. The order is for the GEC 5671 type anti-vandal payphone which has a heavy steel-plate case with special handsets and cords.

AITON AND COMPANY, Derby, a Whessoe Group member, has been awarded a contract, worth about £400,000, for the supply of two seawater desalination plants for installation on British Petroleum's Magnus oilfield production platform.

TEDDINGTON INDUSTRIAL EQUIPMENT, of Sudbury-on-Thames, has been awarded two contracts, valued at £250,000, for the supply and installation of a central control room desk type panel and associated equipment cubicles, together with a large floor standing instrument panel, for British Nuclear Fuels at the Capenhurst plant, near Chester.

Scotland's largest heavy forgers, FIFE FORGE, Kirkcaldy, has won two overseas orders. The firm is to produce six stern tubes at a cost of £231,000 for a Brazilian shipyard and shafting and marine equipment valued £110,000 for a shipyard in Hindustan, India.

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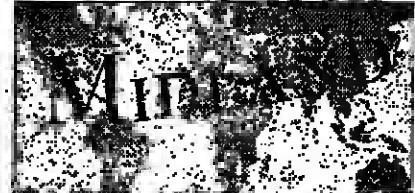
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## UK NEWS

# British Aerospace expects £1bn sales

BY MICHAEL DUNNE, AEROSPACE CORRESPONDENT

BRITISH AEROSPACE expects sales for 1979 to be more than £1bn, according to Lord Beswick, its chairman, who retires at the end of this week. The new chairman is Dr. Austin Pearce, formerly chairman of Esso Petroleum.

Lord Beswick said this week he expected the final accounts for 1979 to show a backlog of orders worth more than £300m. During 1978 the group achieved sales worth £894m, with a backlog of orders worth £2,950m at the end of that year. Lord Beswick said much had been made of Britain's failure as a trading nation, but the aerospace industry "has no need to make excuses for its recent contribution."

"British Aerospace shares with all its suppliers, the

designers and makers of components and equipment, an achievement over the past two or three years which Britain as a whole should recognise and of which it should be proud.

"In British Aerospace itself, where once we had redundancy schemes we now have recruitment problems; where once we had empty floor space we now have new jigs and tools fully utilised; where once the talk was of contraction it is now of expansion."

But Lord Beswick expressed concern at the possibility of cuts by the Government in funds allocated to basic research in aerospace.

To contemplate such cuts "at a time when we are opening a fourth TV channel is just rank

bad national housekeeping," he said.

Among the main contributors to British Aerospace's sales last year were continued production of wings for the European A-300 and A-310 Airbus, record exports of HS-123 business jet aircraft, further export sales of HS-748 feederliners and One-Eleven jet airliners, and continued sales of Hawk fighter/trainers, Jaguar combat aircraft and Harrier jump-jets.

Another continuing major contributor to sales was the high volume of support work for defence establishments in Saudi Arabia and Oman. The refurbishing of older aircraft, such as Canberras, and the sale of spare parts, is also big business for the group.

## Town hall funding changes opposed

BY ROBIN PAULEY

AN EMERGENCY meeting of all 77 metropolitan authorities in England and Wales has been called to step up co-ordinated action against the Government's proposals to change the system of funding local authorities.

The proposals are a serious threat to democracy according to Sir Geoffrey Taylor, chairman of the Tory-controlled Association of Metropolitan Authorities, who has called the meeting for next Thursday.

The block grant proposals are contained in the Local Government Planning and Land Bill now in Parliament.

"We have done our best to convince the government of the serious views we take of its proposals. The joint associations' alternatives have been rejected and there is now no alternative for us but to oppose the bill at every opportunity," Sir Geoffrey said yesterday.

The metropolitan authorities' Association of County Councils, Association of District Councils, London Boroughs Association and Greater London Council, all Conservative controlled, failed to win a single concession from the government on its block grant plans.

Sir Geoffrey said the bill represented the biggest threat to constitutional independence of local government since the last century. It would enable any Environment Secretary to override the democratic right of local electors to decide for themselves the kind of government they wanted to see in their own local areas.

It could lead to direct interference by ministers not only in the overall spending policies of individual authorities but on their spending on individual services, Sir Geoffrey said.

"It could well lead to Whitehall deciding for electors whether they should put the greatest priority on housing or social services or education. Certainly it will limit the democratic right of electors in an intolerable manner that must be resisted."

## Senior civil servants 'should master computers'

BY ROBIN PAULEY

THE FAILURE of senior civil servants to understand computer technology places in doubt their ability to take key decisions, says a Civil Service computer specialist.

Mr. Derek Croisdale, a senior principal who is deputy director of systems training at the Civil Service College, warns that top Civil Servants will have to put themselves in the hands of computer personnel unless they learn to understand the complex computer systems for which they are responsible.

His warning is made in a critical paper which is likely to prove extremely embarrassing to the Civil Service department.

He says: "Computers are far too dangerous to be left in the hands of specialists. A disturbing fact is that there is

apparently no perceived need by top Civil Servants for any more training, especially if it is to last for more than a few days.

"There is an air of complacency despite the need for more senior staff to play bigger roles in the application of computers to administrative work."

Computers are casting their influence in a growing variety of ways, he says, from simple devices to complex mainframe systems with extensive communications networks.

"A growing number of senior administrators will find themselves at under secretary level with the responsibility for making major decisions affecting complex computer-assisted systems. Most of them will be ill-equipped to discharge this

responsibility because their career development will not have provided them with the necessary experience and development."

Referring to the possibility of senior civil servants being manipulated by computer specialists, Mr. Croisdale says: "Who is master and who servant? It is necessary to consider how the administrator and manager ought to collaborate with computer specialists."

The problem arises because administrators have never established a proper working relationship with computer specialists. "Too often, the administrator has abdicated his responsibility to the specialist."

He urges the creation of a post in the CSD of information systems designer.

## Plan for saving rural life in Wales

By Robin Reeves, Welsh Correspondent

A SERIES of initiatives aimed at reversing the economic and social decline of rural Wales was unveiled by the Development Board for Rural Wales in Aberystwyth yesterday.

But the Government-backed board, which has achieved considerable success in attracting new light industry to mid-Wales, is stressing it cannot produce instant solutions to long-standing problems.

It has chosen 25 villages of varying size and distance from towns throughout mid-Wales for a series of experiments which it hopes will make a significant impact.

The initiatives include:

- Establishing new sources of local employment by using mobile buildings as workshops until projects are properly established.
- Designing houses which incorporate workshops, retail space and rooms for tourist letting.
- Encouraging community bus services whereby a bus is provided but the village provides the drivers.
- Maintaining pressure on major oil companies to retain petrol stations in villages and encouraging alternative distributors to set up and expand.
- Arranging training programmes on small-shop keeping and offering business advice to retailers in the selected villages.
- Laying on "rural leadership courses" to encourage individuals interested in, or active in, helping their community.
- Assisting in the development of community co-operative ventures.

Over the past two years, a number of reports and surveys have painted a alarming picture of rural decline in public transport, shops, post offices and schools.

The board says its studies reveal not one main problem but a number of individual village problems.

## Air service to Dublin approved

By Stewart Dalby

THE FIRST direct air link between Northern Ireland and the Continent was approved yesterday.

Five flights a week between Belfast and Amsterdam will be operated by NLM City Hopper, a subsidiary of KLM, the Dutch national airline.

The service starting on April 8 was welcomed by the Northern Ireland Tourist Board, which said until now most visitors from the Continent flew first to Dublin.

### Deterrent

The 100-mile road journey from Dublin to Belfast deterred visitors to Northern Ireland, the Tourist Office said.

In spite of this it is estimated that 26,000 people visited Northern Ireland from the Continent in 1979. The Dutch were, with the Germans, among the most prominent visitors.

The aircraft operating the service will be the 80-seater Fokker F-28 Fellowship, part of which is manufactured by Shorts in Belfast.

## Distribution 'ever more important' for industry

BY LYNTON McLAIN

HANDLING and distribution were rapidly becoming "an ever more important feature of Britain's industrial life," Sir Derek Ezra, chairman of the National Coal Board, told industrial and commercial distribution managers at a London conference yesterday.

The board has one of the biggest handling and distribution tasks in the country. It is devoting a great deal more time to studying new techniques, including greater automation.

Staff had been sent "around the world" looking at automated distribution.

"We must learn from other people's experience."

The conference was organised by the National Materials Handling Centre.

Mr. John Williams, director of the centre, said the cost of movement and storage of materials accounted for 39 per cent of Britain's economic activity.

The centre was set up by Government/industry funds 10 years ago to develop handling and distribution techniques to help cut inefficiency in industry. It is to start Britain's first masters' degree course in distribution technology and

management in October.

Mr. Williams said industrial companies said they needed twice as many staff qualified in distribution as could be trained. But so far he had been disappointed by the response. He urged industry to support students and employees for the course.

Sir Derek, who is president of the centre, told delegates it had just been awarded a £25,000 grant from the Wolfson Foundation to design an automated handling machine for warehouses.

## Call to screen for deafness

MORE THAN 50 per cent of children with significant hearing loss are not diagnosed as deaf until 3 years old, says a report published yesterday by the National Deaf Children's Society.

Total population screening should be carried out by health visitors at 8 months, to diagnose deafness early and enable medical educational help to be given, it says.

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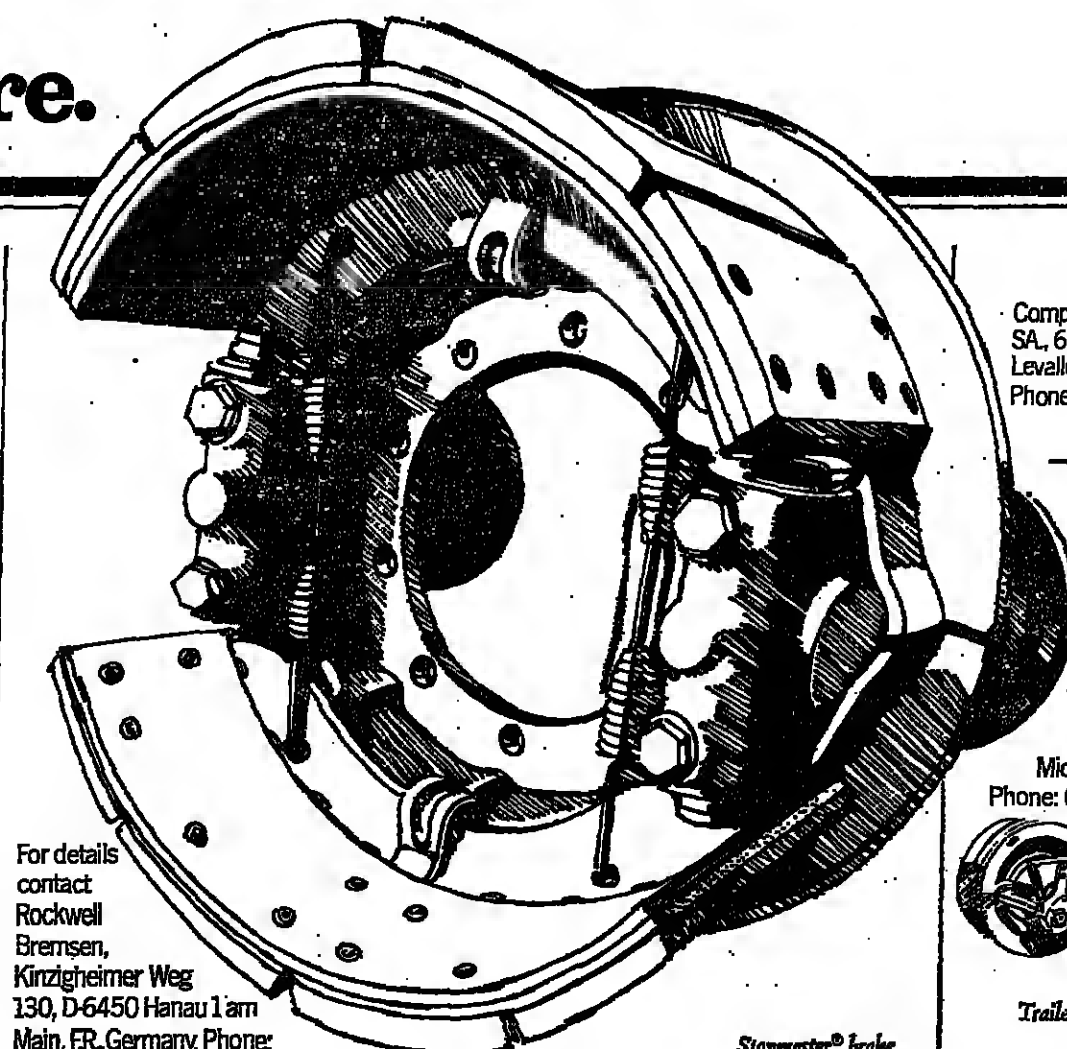
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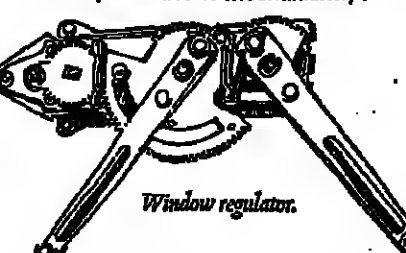
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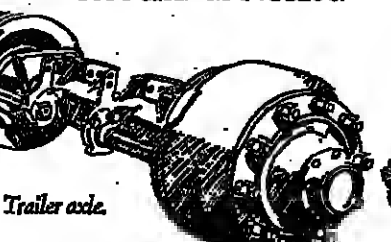
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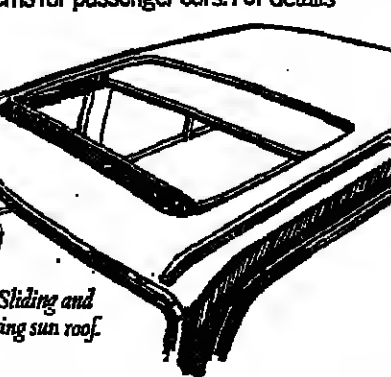
slides and adjusters, sun visors and fascia panels. For details contact

Compagnie Industrielle de Mécanismes SA, 6 rue Barbès, BP 70, 92302 Levallois-Perret Cedex, France. Phone: (1) 758-1770. Telex: 620178.

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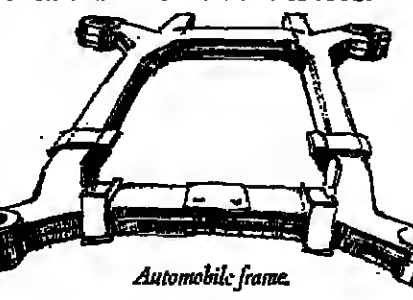
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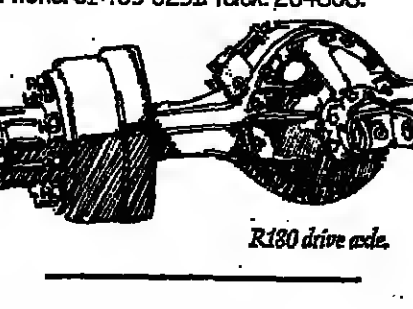
contact one of these two locations: Rockwell Golde GmbH, Hanauer Landstrasse 338, 6000 Frankfurt am 1, FR. Germany. Phone: (0611) 4088-1. Telex: 417 285, or Rockwell Golde Italiana S.p.A., Via Brianza 342, 22032

Albese Con Cassano (Como), Italy. Phone: (39-31) 200-300. Telex: 380271.

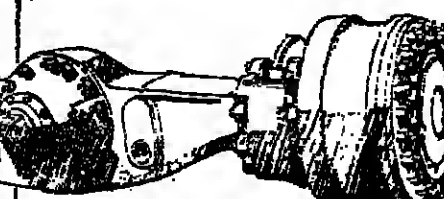
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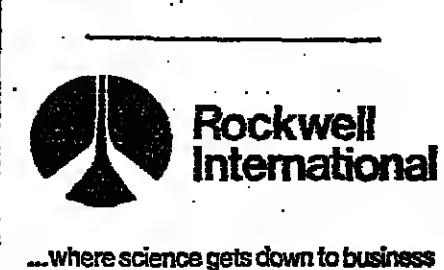
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Magazine so aptly put it, "Roadtrain re-writes on the road standards for heavy trucks."

And who can knock a quote like that. However, to those amongst you whose heads have recently been turned by lesser trucks...it's not too late to repent.

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# UK NEWS—PARLIAMENT and POLITICS

## Conference on public transport violence

THE GOVERNMENT is to hold a conference with unions and transport management over violence on public transport, Mr. Norman Fowler, Transport Minister, told the Commons yesterday.

Mr. Fowler's announcement comes after bloody scenes at Neasden Underground station last Saturday, when 200 youths from rival gangs ran riot.

Train driver Mr. Michael Copeman suffered serious facial injuries and amnesia, and 30 other people, including seven passengers, were treated at hospital after being attacked by youths.

Mr. Fowler said: "I think the whole House will deplore the violence that was seen at the weekend, and to particular injuries inflicted on London Transport staff and on members of the public."

"This is becoming an increasingly serious problem and I can tell you that I and the Home Secretary will soon be holding a working conference, which I hope will be next month, involving trade unions and organisers of transport industries on violence on public transport."

## Vote for missile 'neighbours'

AN ATTEMPT to give people living near proposed cruise missile sites the right to vote on the plan was made in the Commons yesterday by Labour Left-winger Mr. Bob Cryer.

Mr. Cryer (Keighley)—who was given leave to introduce his Cruise Missile Sites Bill—challenged the Government to back its proposal if it genuinely believed in the freedom of the individual to choose.

He claimed his measure could start a movement in Britain, America, and Russia against nuclear weapons and prevent the possibility of Britain being turned "into a radioactive cinder heap."

Mr. Cryer told MPs: "The purpose of my Bill is to remedy a serious defect



Sir Geoffrey Howe, Chancellor of the Exchequer, preparing his Budget at the Treasury.



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# Tougher line on EEC budget

BY RICHARD EVANS, LOBBY EDITOR

THE LATEST assessment in London of European Community negotiations over Britain's contribution to the budget appears to have led to a toughening rather than a relaxation in the Government's attitude.

It was learned, after a meeting at 10 Downing Street yesterday between the Prime Minister, Lord Carrington, Foreign Secretary, and Sir Geoffrey Howe, Chancellor of the Exchequer, that the Government feels its target at the Brussels summit should be raised because of Britain's escalating net contribution.

This was put at £1bn at the time of the Dublin summit last November but has now increased to over £1.1bn and will reach £1.3bn in the next financial year if circumstances remain unchanged.

So if a target of £600m to £700m were acceptable after the Dublin stalemate the suggestion is that more would now be required to make a settlement equitable.

Despite the rather gloomy assessment of prospects made by Lord Carrington after his Council of Ministers meeting in Brussels on Tuesday, Mrs. Thatcher's intention remains to secure a substantial resolution of Britain's budget problem at the Brussels summit on March 31 and April 1.

But Ministers were at pains to stress that there was no intention of going to Brussels issuing threats, and the Prime Minister's warning that the Government might be obliged to consider unilaterally suspending part of Britain's VAT payment was not seen in this light.

The option of suspending the 1 per cent VAT payment amounting to £500m to £600m a year remains a possibility, and Ministers have taken legal advice on the implications.

It is unclear whether withholding the payments by transferring them to a blocked account would break Community laws, but should Britain be taken to court and found guilty, the signs are that the Government would not defy the judgment. As one Minister said cryptically yesterday, there would be other weapons available.

In a further attempt to put Britain's case across forcefully before the summit, the Prime Minister told the West German newspaper Die Welt yesterday that there had to be a solution to the budget problem if the Community was to develop.

She said that at present Britain's contribution was simply not fair. Britain was in seventh place among the Nine in terms of per capita income but in 1980 our net contribution was much more than any other nation's.

"We simply cannot afford this EEC contribution when, at the same time, we are having to cut expenditure at home," she declared.

But she emphasised that if there was a crisis within the Community it would not be caused by Britain but by those who expected the largest contribution from Britain despite its economic position.

"That is not fair, that is inequitable and things cannot go on like this," she insisted.

Mr. Hurd pressed determinedly on. The Government believed strongly that the attendance of British athletes in Moscow would be contrary to British interests, he said. "It was because the Government recognised the sacrifice involved that it was trying to arrange an alternative."

Mr. Hurd continued, dodging nimbly between the javelin and the hammer. Who was going to finance the games? Who would televise them? What sportsmen would compete in them?

Mr. Hurd had few answers—which was not surprising, suggested Mr. Denis Howell, Labour's sporting spokesman. This had been a "ludicrous exercise."

More than 100 national governments had accepted the invitation to Moscow and 18 international sporting bodies had already said they would not sanction any alternative competition. "Any sportsman taking part in it would exclude themselves from international sport," Mr. Howell added.

Mr. Clement Freud (Liberal, Isle of Ely) predicted more precisely that the result would merely be a boycott by those athletes who were now refusing to boycott Moscow.

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# Technical Page

EDITED BY ARTHUR BENNETT AND TED SCHOETERS

## HANDLING

### All-round view

REARWARD-VIEWING television, for mounting on large-capacity dump trucks of the type used in open-cast sites is available from Marconi's electro-optical products division, Basildon, England. This division has developed the equipment as a private venture, working in co-operation with leading companies in the mining and construction industry.

The closed circuit television system, costing approximately £1,400, can be fitted to new vehicles or to existing fleets, for greater safety. Systems have been ordered, by Orenstein and Koppel, for installation on their Giant Wabco 170-ton trucks. These, the largest type of rear dump truck to be used in Europe, capable of payloads up to 170 tons, are being used in conjunction with the largest hydraulic shovel in service in Europe.

This new TV system, the only one fully developed and tested under quarry conditions in the UK, has a rearward-viewing television camera, in a rugged weatherproof housing, mounted on the vehicle, and connected to a monitor in the driver's cab. Shock mounts on the camera isolate the high levels of vibration which are usually encountered in large quarry vehicles. As bigger dumper trucks are introduced into mines and quarries, the difficulties of rearward vision become acute.

## METALWORKING

### Coating metals with protective refractories

TWO new particle coating methods: sol-spray and planetary rolling techniques, for application in metallurgy, have been developed at Harwell.

Evolved under a programme sponsored by the Department of Industry's Chemical and Minerals Requirements Board, they can be used in producing barrier coatings to inhibit or control the reaction rates of materials in a number of molten metal environments. Both techniques can be used for substrate and coating materials production.

In the sol-spray method a non-dispersible powdered coating material is suspended in a colloidal dispersion (sol), and sprayed into a fluidised bed of

substrate particles. The use of the fluidised bed limits particle agglomeration by minimising static particle contact and allows coatings of even thickness to be applied. Coating thickness, density and integrity can be regulated by varying the spray composition, and by control of the final drying and sintering process.

Particles varying in size between 100 micrometres and a few millimetres have been successfully coated with a range of refractory materials. The technique can also be modified, by adjustment of the sol component, to provide conditions suitable for particle agglomeration, allowing the build-up of coated agglomerates

of particles of differing size and density. Planetary rolling has been developed for application where spherical coated particles are required. Here the substrate particles are themselves built up from a fine powder and binder mixture, which when sintered in planetary motion densifies in the form of spherulites. Coatings can then be applied simply by changing the composition of the powder feed and continuing planetary gyration until the required thickness is achieved. Multiple layer coatings can easily be applied in this way. The process is completed by carefully controlled sintering to optimise the densification of both the coating and substrate.

This technique offers a simple method of particle manufacture for materials available in powder form. Many refractory coatings have already been successfully prepared.

Both techniques offer cost advantages over other coating methods (for example sputtering and chemical vapour deposition) and can be easily scaled-up for commercial production.

They could have wide application in the metallurgical, ceramics and materials technology fields. Application developments can be discussed with Dr. Andy Feast, Metallurgy Division, Building 35, AERE Harwell, Didcot, Oxon OX11 0RA. Telephone Abingdon (0235) 24141 Extension 2426.

junction with twin reversing lights, is very effective at night. With the development phase completed, a system, supplied to Murphy Brothers, Mining and Plant Division, is now undergoing an intensive trial at an open-cast coal site in South Wales. The installation, on a Terex R50 truck, is being evaluated under routine working conditions, in all weathers, both during daylight and at night.

Marconi Avionics, Airport Works, Rochester, Kent ME1 2XX. 0634 44460.

### Crane looks over the obstacles

OF PARTICULAR interest to crane operators at small quarries or ports, and anyone who wants a mobile crane for many purposes, Jones (600 Group) has a special version of the 571M, which it has coded 571 EC, for elevated cab.

On the 571 EC, the resting position of the cab is on top of the superstructure, exactly as on the standard crane. It moves vertically up its extending mast, not only giving best possible all-round and down visibility, but also allowing normal operation of the crane to be entirely unaffected.

With the cab at any height the driver chooses between 8.96 and 6.85 metres the full 32-tonne capacity of the crane can be exploited (e.g. 32-tonne at 10-ft radius; 18-tonne at 20-ft radius).

In docks or harbours the Jones 571 EC offers the ability to see over the side and into the hold of a ship at high tide, or over the side of the quay at low tide, or any other obstruction. The crane's boom, when travelling, is 3.96 metres.

The 600 Group, Wood Lane, London W12 7RL. 01-743 2070.

## PRINTING

### UK technology leadership

IT IS over 12 years since Crossfield Electronics introduced the first enlarging scanner to the world's printing and graphic industries and, where quality printing is carried out on web-fed presses, the company's Autotron register control is said to be a household word.

Another new scanner has been added to its Magnascan series. This is a duplicolour scanner with the addition of a Laserdot generator, the electronic alternative to contact screening.

This new facility provides conventional screen angling with the well-proven relative angles of 15°, 45°, 75° and 90°, thereby eliminating the patterning problems of compromise angles inherent to other systems, says the company.

Angles are positioned accurately at the identical ruling for all four colours and so maintain the normal, nonobtrusive rosette formation as well as ensuring freedom from Moiré.

Screen rulings of 75, 85, 100, 120, 133, 150, 175 and 200 lines/inch provide for all requirements and eliminate the cost of stocking contact screens. The required ruling is simply selected with a switch.

Electronically generated dot can be etched by a controlled amount, said to be the ideal compromise between a perfectly hard dot which cannot be etched without break-up, and a soft dot which is etchable but requires critical film processing.

Dot cut-off along sharp edges ensures picture sharpness as well as the best resolution, and the newly designed optical and electronic components secure top performance, reliability and repeatability.

High light output from the laser enables normal orthochromatic lith or line film to be used.

New joint venture for laser platemaking is also announced by the company (which is part of De La Rue).

Crossfield and LogEscan (based in Springfield, Virginia, U.S.) will merge to form a

new company called LogEscan Systems Inc. The last will be located in Springfield and will make and market world-wide the LogEscan 1 Laser Plate-making System, and also develop further the technology of direct laser exposure of offset, di-litho and photorelief printing plates. It is expected that operations will commence on April 1 this year.

Major feature of this system is the direct exposure and production of offset printing plates or a non-litho film for the production of relief plates, a flexibility which will permit newspapers to utilise many existing platemaking systems while avoiding the use of silver based film which has recently increased dramatically in price.

LogEscan products will be marketed through a direct sales force in the U.S., through Crossfield's own companies in Europe, and by distributors in the rest of the world.

More from Crossfield at Hamlyn House, 21 Highgate Hill, London N19 01 272 0255.

DEBORAH PICKERING

## COMMUNICATIONS

### Page transmitted in under a minute

ALTHOUGH 3M, in common with some other makers, feels that the facsimile market has been distinctly slow in getting off the ground in UK business circles compared with the U.S. and Japan, it takes the view that general availability of "sub-one-minute" (that is, Group 3) machines will make a big difference and so has introduced into the UK the model 9600, a digital machine costing just under £9,000.

The machine, of which "several thousand" have already been installed in the U.S., has no speed versus quality choices. Under microprocessor control the 9600 prefaces each transmission with an examination of the line to determine the maximum speed for good quality it will support, up to a maximum of 4800 bits/sec. Furthermore, operation is duplex allowing a document to be sent and another received at the same time.

Digital operation and economic coding of the transmitted signals has yielded much of the speed gain.

Encoding techniques mean that, if there is only a small amount of typed or printed matter on the page, it will take correspondingly less time to be transmitted. Further speed gains are obtained by proprietary data compression techniques.

So far as the user is concerned the least simple part of operation is likely to be the establishment of the telephone call. The called machine answers after five "rings" and after some initial electronic "handshaking" the sending machine takes in and scans any document the user has put in the input tray (up to 50 sheets).

There are also, of course, other means of sending text, so that the growth of facsimile might be inhibited, for example, by the communicating word processing machine.

Nevertheless, according to 3M, about 2000 fax machines of all kinds have been installed in the UK (mostly two-minute units) in the past year giving an installed base of perhaps 10,000. In the coming year a market growth rate of 22 per cent is predicted.

More from 3M, Business Communications Product Group, P.O. Box 1, Bracknell, Berks. (034426726).

GEOFFREY CHARLISH

A useful facility is polling, in which a remote machine can be called up and asked to send any document that has been left in its tray—of great use in transatlantic communication with its associated time zone differences.

By direct connection of the scanning section to the printing unit, the 9600 can also serve as a standby copying machine.

One of the restraints upon the growth of Group 3 machine installation is bound to be the present lack of standards, and to some extent 3M has gone out on a limb by introducing a machine which is not compatible with any other; a 9600 can speak only to a 9600.

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The machine is distributed by Office International (GP), Windmill Road, Sunbury on Thames, Middx. (09327 85666).

GEOFFREY CHARLISH

## SAFETY

### Attention drawn to danger

FROM JUNE onwards, all upholstered furniture which does not conform to certain fire resistance tests, offered for sale in the UK, will have to carry a warning label, says British Furtek, Luddendoot, Halifax, West Yorkshire.

Also in accordance with new government legislation, from December 1, 1981, all upholstered furniture will be required to satisfy the official British Standards test (BS5853) for resistance to ignition by cigarettes, matches and other smokers' materials.

In anticipation of the forthcoming legislation, British Furtek has produced an advisory document which provides full details of official test methods and the reasons for and scope of the new legal requirements.

It has developed also a wide range of moquettes and velvet fabrics (which conform with BS 5853) backed by a range of standard polyurethane foams which promise to help furniture makers and re-upholsterers to conform with the new Government Act.

As part of its customer service facilities, the company has also built a fire testing laboratory to carry out the necessary tests for BS and DOE FR3 specification for contract furnishing fabrics.

## CALCULATORS

### Displays pop up

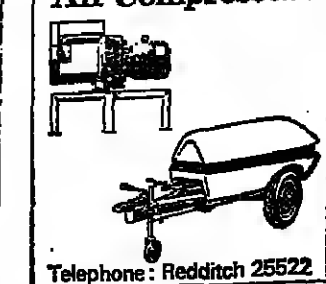
THOSE WHO have perhaps become irritated with wafer thin card calculators having tiny buttons that can be wrongly pressed might be better pleased by the LC1016 from Toshiba.

Measuring 4.3 x 6.3 x 0.3 in. and weighing five ounces, this calculator is as easy to use as a desk-top machine but can still be slipped into the pocket. In use it can be placed on a flat surface and the liquid crystal display flipped up to give improved visibility. But it can also be used in the hand.

Calculating capacity is 10 digits plus sign, and other facilities include a three key independent memory, keys for square root, percentage, sign change and x/y register exchange.

The machine is distributed by Office International (GP), Windmill Road, Sunbury on Thames, Middx. (09327 85666).

## Hydrovane Air Compressors



Telephone: Redditch 25522

## AUTOMATION

### From Slough to Tokyo

AN EXPORT success—and a relatively unusual one—will be the supply by Mars Money Systems of 21 coin validation machines to Nippon Signal Company to Tokyo. The Japanese company is manufacturing automatic fare collection systems for the Madrid Metro and the equipment is expected to come into operation in the summer.

The system does away with ticket issuing and collection staff altogether. A traveller turns an automatic fare collection machine in the validator for his journey and a line signal is provided for the associated ticket machine to issue the appropriate ticket. He then passes through an input gate opened by the ticket to the trains. At the end of the journey, a similar gate lets him out again.

The MMS machines are able to comprehensively check the coins inserted by measuring diameter and thickness and material composition. Mars Money Systems, 286 Bath Road, Slough, Berks. (Slough 70821).

## COMPUTING

### First PET show

ALREADY UNDER way are preparations for the world's first PET show, announces Business Image (incorporating Barness International), 1 Old Computer Street, London W1 (01-724 2807).

A range of approved PET products developed in the UK will be demonstrated on over 50 stands. These will include specific software programs, application demonstrations, hardware products and peripherals, many of which were designed solely by the end-user.

Commodore Business Systems will also exhibit a wide range of PET system configurations and software and its staff will be on hand to discuss these with users and buyers.

# A car driver's licence can carry a lot of weight these days.



Our non-HGV Commando G08 surprises many people with its immense load-carrying capacity. It's a big truck all right. But its plated weight is only 7.38 tons GVW. A big truck for big loads.

The Commando G08 has a strong chassis suitable for either highway or on/off road use. Not all non-HGV trucks can claim that. The frame is light, giving you both strength for durability and a low kerb weight for profitable extra payload.

For operators who want bulk carrying capacity, the Commando has that too. And in real abundance. The long wheelbase models accommodate bodywork up to 5.48m (18ft) in length. Which on a truck like the G08 is as long as a van, dropside or platform as you're ever likely to need.

### A big truck for a small outlay.

The Commando G08 is available with a six-cylinder diesel. It has a luxury tilt cab. Four or five speed gearboxes. Single or two speed rear axles. Optional rear shock absorbers. Air-controlled spring park brake.

As we said, it's a big truck. But no more expensive than many of its less well equipped competitors.

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# THE MARKETING SCENE

BY MICHAEL THOMPSON-NOEL

## MARKET RESEARCH SOCIETY CONFERENCE

### The good times are gone

FOR AN industry whose turnover in the past 10 years grew by approximately two-thirds in real terms, the market research business remains notoriously cloistered and demure—an archetypal cottage industry, or so it would appear, whose greatest single problem is a hinkered introspection.

Those were but two of the epithets employed yesterday by Michael Leach, one of the first-day speakers at the annual conference of the Market Research Society in Brighton.

Mr. Leach is the marketing director of James Robertson and Sons, and was discussing marketing in the '80s and the challenge for research.

He said he had often recommended the use of research in a bid to identify the extent of market problems, from pricing and the growth of own label to the increasing squeeze on manufacturers' margins—problems, he claimed, about which market research companies in general displayed a "blinding lack of understanding" which undermined confidence in the industry.

He said that, all in all—against the increasingly computer-orientated and apparently sophisticated background of modern marketing—the research business looked rather like a cottage industry: too many small companies surviving on very low overheads and a simplistic management style and operation.

The factors he sought to blame were the research industry's "increasing introspection", its alleged failure to communicate its skills and achievements; its rapid loss of confidence, as shown by the "terrible tantrums... on membership grades"; its apparent inability to "rid itself of some of the increasing suspicion shown by members of the public and media alike," and

what he said he thought was a lack of readiness to display a competent and professional face to the rest of the business world.

He blamed the elders of the Market Research Society as much as the mass membership, and suggested the society hire an advertising agency, plus a firm of PRs.

This outburst must have caused more than a frisson as delegates to the society's biggest-ever conference rocked back in their seats in the vaults of the Metropole Hotel. On the other hand, Mr. Leach thought there was plenty of scope for positive reaction: "British business still does not use research in a progressive and sophisticated manner, but I believe this will change—the opportunities for substantial growth are there."

Although market research enjoyed very buoyant growth for most of the 1970s, the going today is definitely harder.

According to the Association of Market Survey Organisations, the combined turnover of its 28 member companies rose by 18 per cent last year—around 6 per cent in real terms. Total AMSO sales were in excess of £50m, compared with the total value of research commissioned, which it put at £28m.

#### Successful

An important feature of the AMSO figures last year is that they include £9.4m worth of UK turnover for AGB Research, the most successful company in the field, which has rejoined the association.

Overall, AMSO members had a very mixed year. There was a squeeze on margins, partly influenced by the end of the pay freeze, and in some cases a sharp fall in profits.

Although the average pre-tax

margin for all AMSO members was eight per cent, about the same as in 1978, the predominantly ad hoc companies' average margin fell from 6.4 per cent to 4.3 per cent. There were significant increases in the proportion of total research commissioned by the motor, advertising, food, industrial, tobacco and medical sectors, and relatively sharp falls in the proportion of research done for the nationalised industries and agriculture.

The current structure of the UK research industry, the demand for research in the 1980's, and the manner in which the industry is likely to adjust to expected changes in demand were the subjects discussed in Brighton yesterday by Martin Simmons and Lionel Gordon of Gordon Simmons Research.

Their main conclusions were as follows:

● Market research will not be a growth industry in the 1980's. The decade will be a period of low economic growth and demand for research will expand only slightly faster than the economy as a whole.

● Traditional research areas have reached saturation point. The growth areas will be the service sector, industrial, pharmaceutical, international and communications research.

● The industry will have to widen its horizons, seeking business outside the marketing area.

● Research users will increasingly expect their research agencies to be problem solvers, not mere data collectors.

● By the end of the decade, the top ten research companies will account for about two-thirds of total business.

● Main impact of new research technology will not be felt until the 1990's, but it will influence the growth of telephone inter-

viewing and central location studies.

● The 1980's will demand a professional approach to research company management, and to promotion to the outside world, government and public.

According to Messrs. Simmons and Gordon: "On balance, we expect overall demand for research to follow closely the economic cycle. This means that the prospect for growth is rather gloomy in the first half of the decade, and particularly up to 1983.

"Thereafter there is likely to be real growth as the industry adjusts to opportunities. For the decade as a whole, we forecast that real expenditure on market research in 1989 will be about 25 per cent above the 1979 figure, only slightly above the anticipated real growth of the economy; that is, just over £100m at 1979 prices."

#### Dominance

They expect an increase in syndicated and omnibus work as against large scale ad hoc studies, less reliance on personal interview techniques and more on telephone and direct logging, and a continuing swing to qualitative research, for budgetary rather than technical reasons.

By 1990 they expect six to ten major research organisations will be dominating the industry, although there will probably be as many small suppliers as there are today.

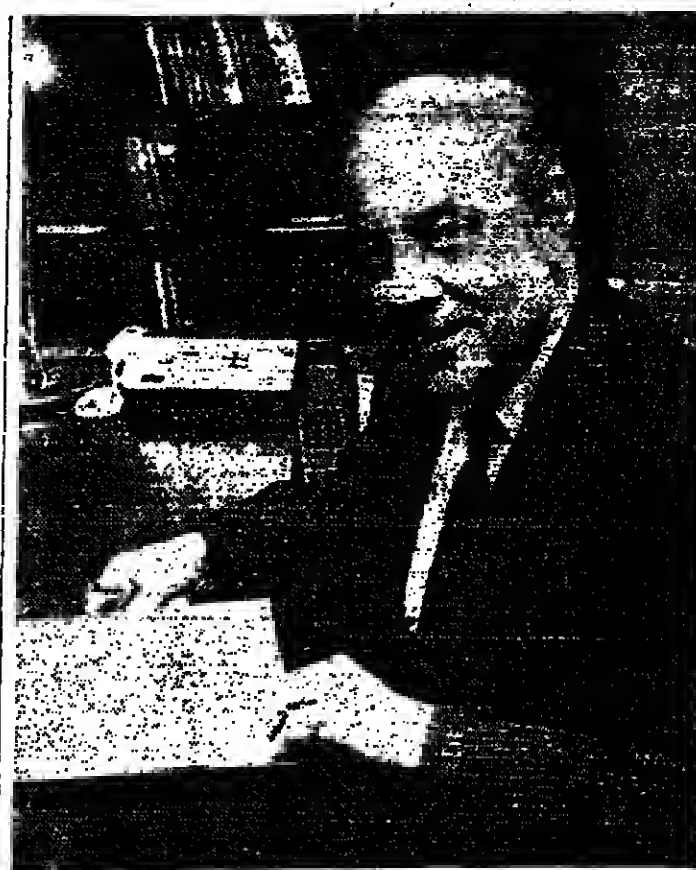
The outlook for the medium sized research agencies, they say, is less certain. Overseas markets will prove attractive, because international research is a growth area, and although implications of new research technology are difficult to forecast, there will be a clear need for more professional research company management.

## MARKET RESEARCH TOP 20 (£'000)

	Year	Turnover	Pre-tax profit (loss)	% Margin
AGB (UK Research Group)*	4/79	9,400	1,400	15
Nielsen	8/79	7,577	984	13
Research Bureau	79	5,348	326	6
NOP Group	9/79	4,241	389†	9
EMRE	79	2,858	96	3
Research Services	79	2,050	11	1
Marplan	79	1,864	67	4
MAS	10/79	1,609	20	1
MTL	1/79	1,527	127	8
Louis Harris	79	1,324	37	3
Taylor Nelson Group	3/79	1,215	115	9
Stats MR	3/79	1,200	47	4
PAS	12/79	1,103	83	8
Gallup	79	980	30	3
Gordon Simmons	5/79	979	74	8
Mass Observation	79	911	116	13
Schlackman	5/79	839	(8)	—
IFF	2/79	776	56	7
Millward Brown	9/79	747	65	9
BJM	11/79	703	41	6

\* Includes Attwood Statistics, Audits of Great Britain, Research Surveys of Great Britain and Industrial Market Research; excludes UK non-research and all overseas activities. † Before profit sharing.

Source: AMSO.



Bernard Audley, chairman of AGB Research.

## AGB: sitting pretty, bidding trumps

THE BIGGEST, most profitable, research company in Britain is the publicly-quoted AGB Research, which recorded consistent and rapid growth throughout the 1970's and looks extremely well placed at the centre of what chairman Bernard Audley shrewdly calls the matrix of the information business.

In 1970, the year it went public, AGB profits were £200,000. In the current year, the forecast group pre-tax figure is at least £2.5m.

In 1979-79, its research

interests, both at home and abroad, yielded profits of £1.6m, but in addition, AGB has moved smoothly into book and magazine publishing, information systems, computer services, exhibitions and conferences.

At present, the research and publishing sides are growing at approximately the same rate, but an important factor in group growth will be its policy of lateral expansion. More acquisitions are due this year, as underlined by its recent one-for-four rights issue.

With research at one extreme and data-based pub-

lishing at the other, AGB's information systems and marketing services fit neatly in between.

"More and more the world seeks to be informed," says Mr. Audley. "The opportunities are enormous." It is because of its diversification into research-related areas, as much as its pre-eminence at the head of the AMSO table, that AGB is sitting pretty.

It has extensive research interests in Europe (it is Europe's biggest research company) and holds the television audience measurement contract in Hong Kong,

which it views as a launch pad for other operations in South East Asia.

One of its most ambitious recent projects was AGE INDEX, which monitors personal finance.

On the research front, Mr. Audley has no doubts that AGB will ride the economic recession in relative style. The main interest will lie in his continued ability to define and exploit the links, as he sees them, between the stamping grounds of research, publishing, information systems and marketing services.

## Fourth channel: fresh lobbying

WITH THE Government's Broadcasting Bill now at committee stage, there is renewed heavy lobbying over who sells airtime on the proposed fourth television channel. The advertising industry wants competitive airtime sales and opposes granting the sales rights exclusively to current ITV-1 franchise holders.

The Government is calling for a tougher and more competitive approach from industry as a whole, said Kenneth Miles, director of the Incorporated Society of British Advertisers this week. "But there seems to be a blind spot on this particular issue. We deplore the extension of the monopoly in the sale of advertising airtime."

Advertisers were concerned that the viability of the fourth channel would be in doubt if the proposed sales monopoly was allowed, said Mr. Miles. "Advertisers would certainly give their enthusiastic support to the new channel if independent sales organisations were involved; but they have deep reservations about the present proposals."

ISBA says that 800 of its member companies provide more than 75 per cent of total ITV revenue. "Against that background, the ISBA cannot disguise its disappointment at the attention that is being paid to industry's viewpoint."

It says it entirely endorses the principle that programming decisions should not be subordinated to commercial considerations, and claims that an "American-style ratings war... just couldn't happen" under provisions already laid down.

Current Government proposals, claims ISBA, would force up prices, permit packaging of peak and off-peak time, and perpetuate "discriminatory pricing."

● ITV NET REVENUE last month was \$42m, against \$27m in February last year.

## 'Pincher' cleared

THE FIAT 127 Palio's bottom-punching poster—headline: "If it were a lady, it would get its bottom pinched"—has been exonerated by the Advertising Standards Authority, despite 21 individual complaints and a letter of protest bearing 34 signatures.

The complainants thought the poster offensive, and "tantamount to inciting sexual molestation." The ASA disagreed. It said it thought the poster would "generally be interpreted as a humorous allusion to the Italian origin of the car."

A spokesman for the agency involved, the prize-hedged Collett Dickinson Pearce, described the judgment as level-headed.

Anyway, he said, the Palio

was especially designed to appeal to women.

● THE CREATIVE consultancy formed by ex-JWT creative director Peter Bostock and ex-Masius creative director Chris Sharpe has gained its first account—the Clark Group, makers of machine tools. Billing will be £200,000.

● PERNOD is launching a £1.5m advertising and promotion campaign, 50 per cent up on last year, when sales showed a 34 per cent increase to more than 300,000 cases.

● FIREXII is spending more than £500,000 on advertising this year.

● CHARLES BARKER, Black & Gross has launched a £250,000 campaign for Subaru's new range of saloon and four-wheel-drive cars.

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The Engineer is not afraid to speculate—but always from an informed standpoint. It does not necessarily take the consensus view. That is why The Engineer is respected and sought after by its readers.

It is no accident The Engineer has been helping to shape developments in industry for 120 years. For wherever decisions are made in industry The Engineer is there—and the readers know about it.

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**"My car couldn't have chosen a more desolate spot to break down. I abandoned it with ill-disguised anger and started walking.**

**I had been going for maybe half an hour when a Volvo estate drew up beside me. Such is my dislike of the car, that had it not been raining I would have waved the driver on."**

Let me start by admitting to a certain amount of irrationality when it comes to cars.

I have always bought cars that are faster than they need be, more luxurious than they should be and more expensive than they've any right to be.

In short, when on four wheels, I am a confirmed seeker after pleasure.

In the opposite corner, I always imagined were Volvo. Austere, frugal and eminently sensible.

The kind of car your mother would say was good for you.

Judge then my feelings as the Volvo stopped beside me on that rain-soaked road.

The driver was not some elderly hill farmer but a man I would not have put much above thirty-five.

"Can I give you a lift?" he enquired as he held open the door. "I passed your car down the road—beautiful looking machine."

As I slipped into the passenger seat I noticed that I was sitting on real leather. (The first of many discoveries I was to make that evening.)

"Let me introduce myself, my name is James Durban." When on the defensive, I invariably hide behind formality.

My rescuer was more relaxed and told me that his name was Tony and that he had a house some twenty miles away.

"Have you driven far?" I asked.

"About 300 miles" he answered. "But it's very easy in the Volvo. The 265 is a very long-legged car."

"You must have spent a fortune on sound insulation" I said with an ear to the uncannily quiet performance of the engine.

"Not a bit. It's a 6-cylinder engine. 2.7 litres with fuel injection and a light alloy block. And as you can hear very quiet."

The conversation was taking a turn that displeased me. As he steered the car expertly through the narrow country roads I attempted to steer the conversation towards more general topics.

"What do you do?" I asked.

"I'm a writer and I deal in antiques. I've just bought the coffer you see in the back."

I turned round and noticed that the rear seats had been folded flat and that we were travelling with a beautiful oak chest at least 6 ft in length.

By now I was beginning to go through that most uncomfortable of human emotions—a change of mind. However, I wasn't about to give up without a struggle.

"Yes a jolly practical car the Volvo, but it's a bit short on the creature comforts don't you think?"

Looking back I'm surprised he didn't turf me out there and then. Instead, he simply defeated me with facts.

"Well," he began, "there are a few standard features you might appreciate. Like air-conditioning, electric windows, power steering, heated driver's seat..."

"How thoughtfully Nordic" I muttered gracefully.

He continued with a light smile, "Metallic paint, electrically operated door mirrors, heated rear window, central locking."

I interrupted him. "Alright, point taken. And I suppose you still haven't come to things like a cigar lighter, electric clock and a light in the glove box?"

"Exactly" he replied. "The Volvo has all of those, not to mention stereo speakers in the front doors."

The rain had begun to ease and as my clothes dried out I recovered a little of my customary good humour.

"Well, it's certainly more comfortable than I thought, is it expensive?"

"With the automatic gearbox it runs out at £9,868."

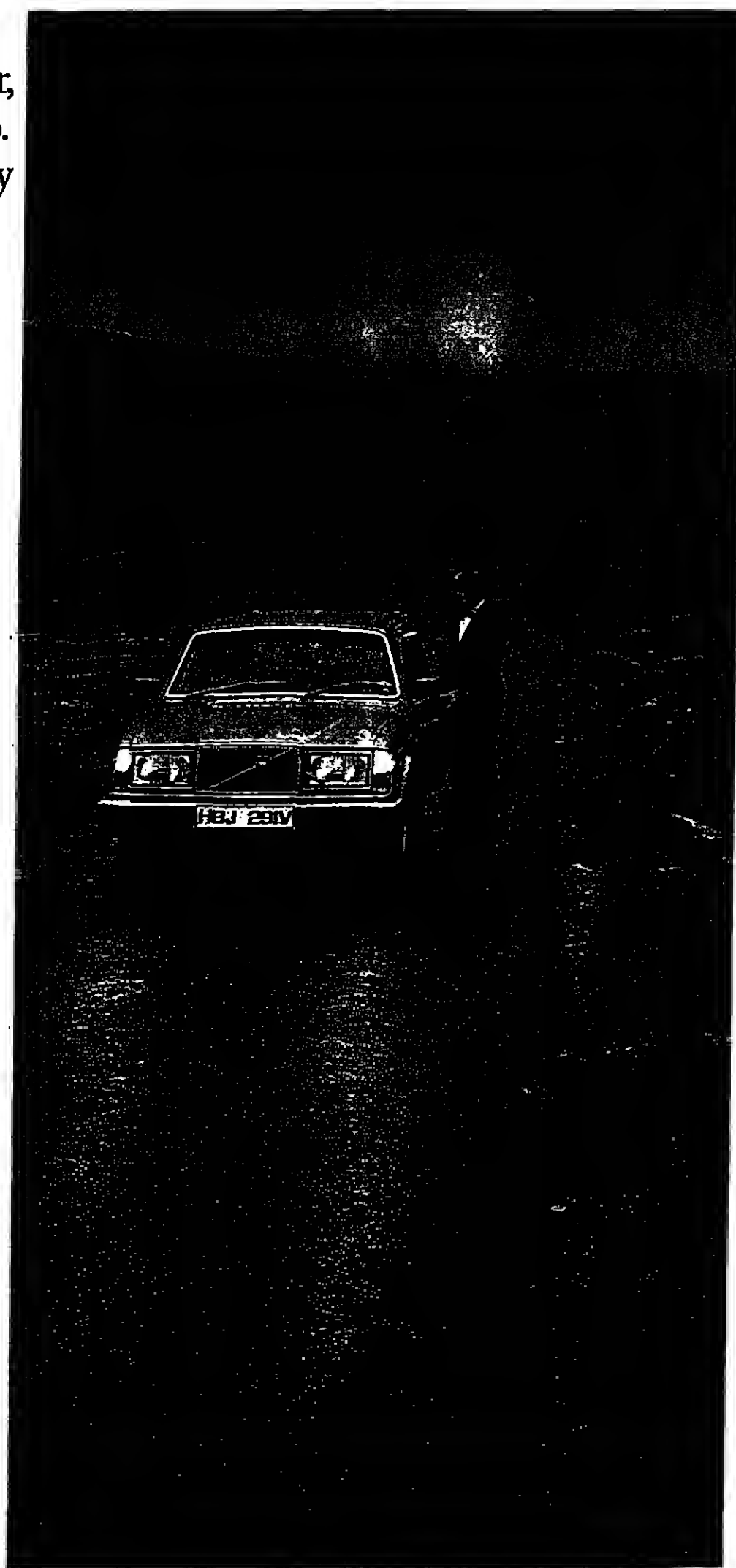
When I thought of what I had paid for the piece of exotica languishing on the road some fifteen miles behind us, I was stung to one last justification.

"Of course, my car is much faster. I can reach 150 mph on a good dry road."

"It's not quite so fast in the wet though, is it?" He asked the question in the mildest voice possible. To my credit, after a moment's hesitation, I burst out laughing.

"Touché" I said and for the rest of a very enjoyable journey we talked about antiques.

**The Volvo 265.**





## JOBS COLUMN; APPOINTMENTS

## Home thoughts from abroad, and vice versa

BY MICHAEL DIXON

"CAN YOU tell me how to get hold of a full list of the reputable recruitment consultants?" asked a telephone caller yesterday, shoving another coin into the box to keep the pips at bay for a little longer. The call was somewhat unusual in being made hurriedly from a British airport. But the request, and its maker, were typical of a sizeable part of the Jobs Column's regular clientele—people working abroad who are anxious to find a new job at home.

The sort of help they need is, in my experience, particularly hard to supply.

The sad evidence is that the general employment market caters even less well for demonstrably capable managers and specialists who want to repatriate themselves, than it provides for their unemployed counterparts at home.

In illustration I will quote some statistics lately sent to this column by the John Courts and Partners selection consultancy, which primarily show that fewer than five in every 100 unemployed managerial types remain out of work for more than a year.

Of the successful 95, fewer than 20 obtain their new job through a recruitment agency or consultancy. I am surprised that the fraction is as high as that. The job of most employment middle-men is not to find

posts for people, but people for posts, and so by no means all such consultancies maintain registers of the names, addresses and qualifications of aspiring job-changers. And even the consultancies which do so, appear to fill from their register no more than a minuscule proportion of the posts referred to them by employers.

Consequently, I would say that success in returning to managerial employment through a consultancy depends importantly on being in a position repeatedly and persuasively to remind the consultants of one's clear suitability for a large share of the jobs on the market. People working abroad are in general poorly placed to do that.

Of the successful 95, a further 15 "get back" by way of newspapers and magazines—a fair number of them, I hope, with the aid of this column. But as yesterday's telephone caller said, despite the increasing international circulation of the Financial Times, he and many like him do not see the "home" newspapers until well after their first publication. "It doesn't help," he added, "not to be able to strike until the iron is at best lukewarm."

The best course for would-be repatriates seems therefore to be indicated by the remaining 80 of the successes noted in the statistics provided by John Courts.

The three score obtained their jobs by means of direct approaches to contacts in employing organisations or—as Mr. Courts appropriately puts it—by using their "personal bush telegraph."

What are the most effective ways of developing and using a bush telegraph, is also another of the multitudinous things the Jobs Column does not know. But it proposes to try to find out—in conjunction, as it happens, with an FT stablemate: the quarterly magazine *Resident Abroad*.

So, although another appeal is still current (that for the views of people experienced in their job on the abilities that job really needs, and more advice would be welcome even though I already have enough to pass on in a column soon), I would appreciate information from readers who have already successfully repatriated themselves, on how best to do so.

## Kuwait or Italy

MEANWHILE, since there will doubtless be readers inclined in the opposite direction, we shall turn to openings for people thinking abroad thoughts from home. Inquiries about the first two should be sent to John Williams of the Whitehead Technical Services consultancy (21 Wigmore Street, London

W1H 9LA; telephone 01-580 0191, telex 277881). In neither case may be name the employer, and so be promises to abide by any applicant's request not to be made known to the company concerned until permission is given.

One of the posts is for a sales manager to be based in Kuwait with a trading company operating mainly in the area of the Arabian Gulf. The concern deals in equipment for the construction and automotive industries, for materials-handling, for use in oil fields, shipping and general engineering, and also in supplies of building materials.

The sales for which the newcomer will be responsible, along with two dozen experienced representatives, will principally involve heavy construction equipment.

Candidates should be sales engineers with at least 10 years successful experience in a similar field. The age indicator is 30-45. It does not matter whether applicants are single or have a family.

Salary for the post, offered on a two-year renewable contract, will be £16,000 to £18,000 tax free. Perks include furnished accommodation and free medical care.

Mr. Williams's other search is on behalf of an international group in civil engineering and construction. This needs a

senior systems engineer, based in Milan, to design and bring into reality what various clients need by way of continuous production processes for such manufactures as petrochemicals and steel, work-time recording systems, and suchlike.

Candidates here need to have an appropriate qualification equivalent to a degree, followed by at least three years success in designing and installing computer-based systems. They must not, however, be the autistic kind of engineer, because much will depend on the recruit's ability to get on with the clients.

Fluency in Italian or other major languages would help, but English alone is essential. There will be periods of travel to other parts of the world. Salary £12,000 to £14,000.

## Germany

NOW TO Stuttgart in Germany, which will be the base of a paragon being sought by Michael Wood of the Search and Assessment Services consultancy, on behalf of the textile-machinery subsidiary of the Swedish-owned SKE group.

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ticular emphasis on generating new products and adapting the existing range to meet the changing needs of the market. The domain will include some 60 staff, with seven departmental heads in immediate support.

Mr. Wood is looking for a rare combination of an engineer whose creative talent is guided by a sound commercial sense, and a strong but persuasive manager. Candidates must be qualified in either textile technology or mechanical or electrical engineering. They also need to have at least three years experience in the practical development of advanced textile machinery, and to have managed at a level sufficiently senior to provide them with understanding of marketing problems.

A candidate demonstrably able to take charge of the company's quality control as well, would have an advantage. Fluency in German, or at least the ability and willingness to learn it fast, is another need. The age range is about 35-50. Nationality is of little importance.

Salary around DM 100,000 (about £24,750 at current exchange rates). Inquiries to Mr. Wood at 23 High Street, Banbury, Oxon OX16 8EG; telephone in working hours 0295 58855, at other times 0295 721420.

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The Company is engaged in the manufacture of soft drinks essences for export markets throughout the world. The firm has expanded rapidly since commencing manufacturing in Ireland in 1973. Its capacity is currently being increased to cope with growing demand for its products.

Reporting to the General Manager, the Chief Accountant's responsibilities will include annual budgets, monthly management reports, product standard costs, cost control and personnel policy. Responsibility for purchasing, quality control, and manufacturing budgets will be added with the eventual appointment to General Manager.

Applicants must have a professional accounting qualification. The preferred age group is 30-40 years.

Salary is negotiable but will reflect the responsibility and importance of the post. A car and other fringe benefits will be supplied and relocation expenses will be paid.

Applications, giving a full detailed resume of qualifications and experience, should be sent to:

Mr. R. L. Giddan,  
Canada Dry International Inc.  
1-11 May Hill,  
London W1X 7LF.

## MANAGING/FINANCIAL DIRECTOR

MANCHESTER BASED

£12,500 + Car + Pension scheme + Private health scheme  
Our client, an expanding company in the chemical industry, seeks to appoint a Managing/Financial Director who will be responsible to the Chairman. The successful applicant will be a qualified accountant who will have obtained considerable commercial experience preferably in the chemical industry but not essential. Applicants should apply in their own handwriting giving full details of experience and career to date to:

DOWNHAM JAFFE & COMPANY  
Accountants  
Northern Assurance Buildings, 9/21 Princess Street  
MANCHESTER M2 4DN



## Career Opportunity in International Finance

**The Challenge:** The International Finance Corporation, the affiliate of the World Bank promoting the private sector in developing countries, is seeking highly qualified individuals willing to accept the challenging opportunities of a career in international development.

**The Task:** IFC Investment Officers identify and appraise proposed investments, negotiate and present proposals to the Board of Directors plus supervision of IFC investments, all within a multi-national and multi-disciplinary team.

**Requirements:** Candidates should possess a relevant degree and have at least five years' financial or industrial experience in lending, funding or equity investments with management implications, preferably in developing countries. Involves frequent travel to assigned countries. Command of English essential; fluency in French or Spanish a definite asset.

**Benefits:** Competitive benefits package including relocation expenses on appointment and provision to maintain cultural ties with home country.

Please send resumé in English quoting Ref: IFC-1080-01203 to: Ernest T. W. Fones, Senior Personnel Development Officer, International Finance Corporation, 1818 H Street, N.W., Room 1-9-169, Washington D.C. 20433, USA.



INTERNATIONAL  
FINANCE  
CORPORATION

## Financial Director

Home Counties  
c.£25,000

A distinguished UK construction group with £50m turnover seeks an experienced financial manager. This is a broad commercial role, with particular scope for short term contribution in improving management information, current asset control, trading margins and EDP systems. There will also be involvement on major contract policy and corporate acquisitions.

Candidates must be qualified accountants aged 35 or over with some past experience in the contracting sector, who have also been responsible for the financial management of a significant profit centre. The stature and powers of communication necessary should be evident. Prospects extend to general management.

For full job description write in confidence to John Courtis at 78 Wigmore Street, London W1H 9DQ, showing clearly how you meet these requirements, quoting 7051/FT. Both men and women may apply.

John Courtis  
...and Partners...

## Fund Management/Corporate Finance

£8,000-25,000

The City

We would like to talk to people in their late twenties or thirties who are on their way up in the Securities/Banking industry. Our Clients include leading Merchant Banks, Fund Management Groups and Stockbrokers.

We are interested in talking to people who are not necessarily seeking a job change but who are interested in planning their careers. As an indication, we are currently looking for people in these areas:

INSTITUTIONAL FUND MANAGERS	Major Merchant Banks	£ Neg.
EUROBOND MANAGER	Major International Bank	to £25,000
CORPORATE FINANCE	Young A.C.A.s or Solicitors	c. £11,000
INSTITUTIONAL SALES	Individuals or groups	c. £13,000
PRIVATE CLIENTS	Fund Manager	c. £10,000
INVESTMENT ANALYSTS	Banking and Insurance Sectors	to £16,000

Please write with brief career details to Colin Barry at Overton Shirley and Barry (Management Consultants), Second Floor, Morley House, 26 Holborn Viaduct, London EC1A 2BP, or alternatively telephone Colin Barry or David Barton for a confidential discussion on 01-453 1169.

Overton Shirley  
and Barry **OSB**

## Finance Director

Darlington c.£11,000 + bonus

For West's Prochem Limited which is part of West Group International, a successful British engineering Group. The company operates in the international oil, chemical and process industries for whom it provides design, procurement, construction and complete engineering management services. It is staffed by a highly qualified team of multi-discipline engineers. The F.D. will also be Company Secretary.

Reporting to the Managing Director, he or she will be responsible for directing and developing all aspects of the company's financial management function and will contribute to future policy as well as assisting line managers.

in the control of business operations. Candidates must be Chartered Accountants with several years' financial management experience in an engineering or process industry where they have been responsible for the complete accounting function. They must be familiar with a.d.p. as a user and accustomed to well developed forecasting, control and reporting systems. Age 32-38. Benefits include sizeable profit-related bonus, excellent pension scheme and car.

Please write in confidence with brief relevant details to H. C. Holmes, Bull, Holmes (Management) Limited, 45 Albemarle Street, London, W1X 3FE.

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PERSONNEL ADVERTISERS

## Accountant

for  
Rapidly Expanding Leasing Company  
c. £10,000 City

Leasing is one of the most dynamic activities of Williams & Glyn's Bank. The Leasing Group comprises four operating companies and six partnerships and now has leased assets exceeding £100,000,000.

This new position, brought about by rapid growth, requires an Accountant with up to 2 years post-qualifying experience. Supported by a team of four the successful applicant will be responsible for day to day accounting, preparation of management and statutory accounts, cash control, new business administration and a number of other duties including VAT and rental invoicing brought together under the heading of general administration. The ability to work accurately to demanding timetables, to understand fully the concepts and practices of leasing and to motivate staff is essential.

Total remuneration around £10,000 is being offered plus exceptional house purchase facilities, generous holidays, season ticket loan and free banking. If you would like to work with us and can meet our rather demanding requirements please contact: Michael Brookes, Williams & Glyn's Bank, New London Bridge House, 25 London Bridge Street, London SE1 9SX.

WILLIAMS & GLYN'S BANK

## LOUGHBOROUGH UNIVERSITY OF TECHNOLOGY MIDLAND BANK FELLOWSHIP

Applications are invited for a Midland Bank Fellowship in the Practice of Banking, tenable in the Department of Management Studies of the University. The person appointed will contribute to the department's teaching programme and will be encouraged to initiate research within the field of banking. Applicants should possess a relevant degree and/or professional qualification. Starting salary for this three year post will be within the scale £5,062-£5,769 per annum. Postcard requests for further details and application forms to Paul Johnson, Establishment Officer, ref. 80/8 MS, Loughborough, Leicestershire.

## Young Credit Analyst

This expanding international bank requires a qualified banker with approximately six months' experience within this specialised field. This first class opportunity will offer scope for further career development within the marketing services area.

Age 23-30 £6,500 neg.  
For further details call:  
Mike Blundell Jones  
PORTMAN RECRUITMENT SERVICES  
Ramillies Buildings, Hils Place,  
London W1R 2LX. Tel: 01-439 4381

## Hoggett Bowers

Executive Selection Consultants  
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## Finance Manager

Age 26 plus  
N. London; c.£11,000

The company is one of the important U.K. subsidiaries of a major multi-national corporation involved in the entertainment, consumer goods and leisure industries. It employs 45 and turnover is over £5m. and growing rapidly. Reporting to the Financial Controller, the Finance Manager will join a young positive company management team, and will take staff management responsibility. Key tasks will be to further increase the sophistication of financial controls and management reporting systems to meet the increasing needs of the business. U.K. Group prospects are excellent. Candidates, probably Chartered Accountants, will have a minimum of 2 years' commercial experience gained ideally in the retail or distributive trades, but certainly in a company with a well organised financial control function.

G.R. Forester, Ref: 13268/FT. Male or female candidates should telephone in confidence for a Personal History Form to: LONDON: 01-734 6852, Sutherland House, 5/6 Argyl Street, W1E 6EZ.

## MARKETING POLICY MANAGER

EDINBURGH-£10,000 NEG+CAR

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This is an opportunity to join a fast growing company at a senior level, and applicants will be expected to demonstrate a successful career to date with experience in Consumer Marketing/Market Evaluation, together with economic and statistical skills. It is likely that the person appointed would have a degree in Economics, Business Studies or some related discipline, and would have not less than 10 years commercial/industrial experience, almost certainly including a period with either management consultants or an advertising agency. An essential asset will be the ability to present analyses succinctly and convincingly, both verbally and in writing.

Please write, with full curriculum vitae, to J.H. Rowe, Director, Hall Advertising Limited, 11 Chester Street, Edinburgh EH3 7RQ.

HALL ADVERTISING

## COMMERCIAL CONTROLLER

Applications are invited from qualified chartered accountants for the above position which will be based in West Africa. Candidates should ideally have had previous experience in a similar position in an overseas environment preferably within the petrochemical industry. Specific duties and responsibilities will include the implementation of new systems, regular monthly reporting, credit control and the supervision of local staff. This is a contract position which may be renewed after one year. The overall package offers a highly attractive salary and provision for married status accommodation. This is an urgent requirement, therefore preference will be given to candidates who can relocate at very short notice.

For further details and information please call, S. OLIVE, Personnel Manager, Solus-Ocean Systems, Abbotswell Road, Aberdeen. Tel: Aberdeen 876600.

## INTERNATIONAL BANKING

**BUSINESS DEVELOPMENT** c. £8,000  
A good opportunity to assist senior management of a major European bank in the development of corporate business relationships. The ideal candidate would be a young banker with a good educational background and practical banking experience including some credit training... or possibly a numerate graduate looking for a career in a first-class international bank.

**HEAD OF F/X SETTLEMENTS** to £10,000  
Well-established international bank seeks a mature banker who combines the technical skills in F/X support operations with the strength of personality necessary to manage and develop both the system and the people in the team.

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Expanding City bank extends progressive career to a young banker with good credit training and experience and genuine promotability.

**MANAGEMENT ACCOUNTING** c. £6,500  
A situation offering wide-ranging responsibility to a young person with skills and interest in international bank accounting and reporting.

Please telephone either Ann Costello or John Chiverton, A.L.B.

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## Manchester Stockbrokers

Require Partners Assistant

An ideal candidate will be educated to at least "A" level standard and possess investment portfolio review experience, not necessarily in stockbroking. Age immaterial, salary by negotiation.

Write Box A7094, Financial Times, 10 Cannon Street, EC4P 4BY

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**SENIOR FX DEALER** £10-15,000  
This vacancy, based at the principal London office of a small overseas bank, would suit a mature and experienced Foreign Exchange Dealer whose dealing contacts would assist the bank in progressing towards its aim of full authorization.  
Contact KEN ANDERSON

**LEASING EXECUTIVES** £15-18,000  
Our client, a leading international bank, require experienced leasing executives to assist in the development of this business area. Candidates should have a strong academic background including either an MBA, ACA, or Economics degree combined with knowledge of big ticket leasing and experience in marketing, rate structuring, signing off deals etc. ... Command of a European language would also be useful.  
Contact BRIAN GOOCH

First floor-entrance New Street  
170 Bishopsgate London EC2M 4LX 01-623 1266



## Controller Oil Industry

London c. £17,500 + car

Our client is a British oil company with a turnover in excess of £1,000 million, which owns exploration, production, refining, shipping, and marketing subsidiary companies in various parts of the world. The company currently is enjoying record operating results in all its major divisions.

The UK exploration subsidiary now wishes to appoint a Controller to direct the accounting and financial aspects of its operations, reporting directly to the Managing Director. Outstanding career prospects exist within this expanding Group.

Qualified accountants aged between 30-40 who can demonstrate sound experience of North Sea exploration accounting, together with the personal attributes required for senior management, should apply in confidence, quoting Ref. U865/FT giving concise personal and career details, to D. E. Shellard Executive Selection.

**AMS**

Arthur Young Management Services  
Rolle House, 7 Rolle Buildings  
Fetter Lane, London EC4A 1NL

THE GAMBIA

## Assistant Managing Director

GAMBIA UTILITIES CORPORATION

The Corporation which was established in 1972 undertakes the supply and distribution of water, electricity and bottled gas and is currently consolidating and extending these supplies, the work being financed by loans from national and international lending agencies.

The Corporation retains Consultants to advise on and assist in the implementation of various aspects of the extension, operation and management of the utility services. The present requirement is for the services of an Assistant Managing Director who will act as Managing Director whenever so delegated. He will be required to co-ordinate all aspects of short and long term planning, co-ordinate the work of consultants, evaluate their reports and implementing their recommendations as necessary and submit reports to the Managing Director and the Board of Directors. He will ensure the efficient and effective operation of the Corporation through the Financial Controller and the Managers of the Electricity and Water Divisions.

The successful candidate, who shall be fluent in English, will be a graduate having chartered engineer status or equivalent and 10-15 years experience in a public utility, preferably electrical, leading to a position of senior executive responsibility. A postgraduate management degree or equivalent will be an advantage as will experience in a developing country. The ability to work with and motivate employees at all levels is essential.

The initial appointment will be for a period of two years. The salary, which will be free of Gambia tax, and may be paid into any bank nominated by the successful applicant, will be negotiable according to experience. Benefits include free housing and provision of a car.

The successful candidate will be required to pass a medical examination. Applications stating full relevant details, present salary, availability and salary required, should be addressed to:

MERZ AND McLELLAN (Ref: LBK) Consulting Engineers, Amberley, Killingworth, Newcastle Upon Tyne NE12 0RS, England.

Preliminary interviews with selected applicants will be held in the UK, the final selection being by the Board of Directors following interview in Banjul.

The appointment is being financed under a credit from the International Development Association.

The latest date for receipt of applications will be one month from the date of publication of this advertisement.

**MERZ AND McLELLAN**  
CONSULTING ENGINEERS

## Export Credit Manager Uxbridge

This is a key Head Office appointment involving the overall control of export accounts for a multi-million pound turnover organisation, with customers throughout Europe, Africa, and the Middle East. Armstrong manufacture a wide range of flooring, ceiling and insulation products for both home and overseas markets.

The successful applicant will be responsible for managing the investment of all export accounts receivable, maximising profitable sales and receivables turnover whilst minimising the losses due to non-collection. The Export Credit Manager works closely with the General Manager, Customer Financial Services, in making recommendations, analysing and administering credit business utilising sound commercial information, liaison with associate companies and his or her experience of foreign economic conditions, laws and trade practice.

Candidates should have experience of shipping procedure, and documentation, credit management and export administration. A good standard of education is important with ideally a working knowledge of French and/or German and you should be prepared to study for ICM qualifications if not already qualified. Applicants must hold a current driving licence and be willing to travel.

The rewards package will include an attractive salary and all the benefits associated with a multi-national company.

For further information and an application form please write or telephone J. R. Turner, Personnel Manager, Armstrong Cork Company Limited, Armstrong House, Chequers Square, Uxbridge, Middlesex, Telephone: Uxbridge 51122.

**Armstrong**

Expanding firm of Manchester based Stockbrokers are seeking additional sales staff, with private clientele, to be based in either their Manchester or London office.

Write Box A.7093, Financial Times,  
10, Cannon Street, EC4P 4BY.

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Apply in writing to:  
Box No. 332, Streets Financial Ltd.,  
18 Red Lion Court, Fleet Street,  
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## Senior Tax Adviser

Victoria SW1 c. £15,000-£18,000

required by one of Britain's largest multi-national companies at Group Headquarters. The company has six major operating groups functioning in 78 countries with an annual turnover in excess of £6,000m.

The importance attached to the tax function reflects the size and diversity of the organisation. The Adviser will join a small senior management team reporting to the Main Board on all corporate tax matters, and must have a record of success in solving complex technical problems involving foreign and UK taxes as well as comprehensive knowledge of financial management and statutory reports.

Please apply for an application form, or initially, forward brief information on qualifications, experience, date of birth and current salary to: S. Miles, Personnel Manager, B.A.T. Industries Limited, P.O. Box 345, Windsor House, Victoria Street, London SW1H 0NL.

**B.A.T.  
INDUSTRIES  
LIMITED**

## MANAGER- MANAGEMENT ACCOUNTING

London

c. £12,000

Burmah Oil Tankers Limited, part of the Burmah Group, operates a crude oil tanker fleet and a major oil trans-shipment terminal in the Bahamas. A Manager-Management Accounts is required to help establish a small financial unit which will be an integral part of the business management function. He or she will be part of a professional and highly motivated management team.

Reporting to the Finance Manager, the tasks will be primarily of an analytical, budgeting and financial forecasting nature. The activities could range from in-depth analysis of regular monthly financial performance to financial appraisals of all projects related to the varied activities of the company, including a careful consideration and analysis of long-term financial and planning requirements.

Candidates must be either graduates aged 28 to 35 who are also qualified accountants or MBAs. At least five years' financial experience is required to include exposure in an

analytical/budgeting type function, preferably in a shipping environment. They must be able to assimilate information quickly and accurately and to make rational judgements from their analyses. In addition, they must be articulate, persuasive and able to influence and motivate others.

Success in this role could lead to career advancement within the Burmah Group.

Initially located in the City, there are plans to move the office later this year to the Knightsbridge area.

Terms and conditions of employment are attractive and include a negotiable salary, non-contributory pension and BUPA benefits.

Please send a full CV or ring or write for an application form to D.G. Freestone,

Recruitment Manager,  
Burmah Oil Trading Limited,  
Burmah House, Pipers Way,  
Swindon, Wilts SN3 1RE.  
Telephone: 0793 47400.



## Management Accountant

Central London

c. £9,000

This is an interesting new position at Senior Level with one of Britain's leading publishing companies. The post calls for an enthusiastic, recently qualified accountant, looking to develop his/her career in a stimulating environment.

The person appointed, as part of a Divisional Finance Team, will be expected to make a significant contribution to the development of finance and management information systems, with specific responsibilities for appraising and reporting on the performance of UK and overseas subsidiaries.

**PA Advertising**

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Our client is an established leader in a major sector of the financial services market and since its flotation in 1976 has expanded, through its entrepreneurial and marketing skills, to an asset base exceeding £250m. The company wishes to formalise and give added impetus to the investigation of cost savings ideas by appointing a qualified accountant to set up and run an effective cost saving function. After 18 months successful performance on this project, it is intended that the candidate will take up a more senior appointment.

Candidates should be qualified accountants, aged 28-32, with a strong technical background in accounting for management and preferably with some experience of cost analysis or control in commerce or industry. Other essential requirements include management ability and the personality to identify with a highly competitive environment.

For further information and a personal history form please contact Jim Tomlinson, 410 Strand, London WC2R 0NS, 01-836 9501, quoting reference no. 2812.

## DOUGLAS LLAMBIAS

Douglas Llambras Associates Ltd.  
Accountancy and Management Recruitment Consultants,  
and at 26 West Nile Street, Glasgow G1 2PF (041-226 3101)  
3 Coates Place, Edinburgh EH3 7AA (031-225 7744)



## Credit Analyst

Middle East

£15,000+ tax-free

We are an international firm of executive search consultants and have been retained by an important Middle Eastern financial institution to identify a credit analyst to review and analyse an assigned number of commercial borrowing relationships.

The successful candidate will work closely with the team of account officers to which he is assigned and will report directly to the Senior Staff Credit Officer of the institution.

The candidate should have a good educational background training in credit analysis, and several years practical experience with a commercial bank. A basic understanding of corporate and project finance would be an advantage. Familiarity with the Middle East would be desirable and the candidate should be able to work easily with a wide range of nationals and adapt to living and working in the Middle East. Candidates must be fluent in English and a knowledge of Arabic would be an asset.

Our client is anxious to attract an individual of outstanding character and competence, and in addition to the base salary offers free furnished housing, a car and a generous range of fringe benefits.

Box FT/608

St James's Advertising & Publishing Co. Ltd.,  
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## Group Financial Controller

LONDON AREA

c. £15,000 negotiable, plus car and benefits

We are conducting a search for a broad gauge, qualified accountant whose career has progressed to the level of Division Controller. Our client, whose products are marketed internationally and whose sales are over £50m, has created a new Group position which will embrace a relationship with Division Controllers through Divisional Managing Directors.

Candidates should have good financial controller's experience, high intelligence and excellent commercial awareness. They should be able to direct all financial activities of the Group. The Group Financial Controller will report to the Group Managing Director and Chairman.

Curriculum Vitae, in confidence, to:

Paul H. Kiernan, Chairman  
KIERMAN & COMPANY (UK) LTD.  
Management Consultants  
23 St James's Square, London SW1A 1HE

**Kiernan & Company**

LONDON BOROUGH OF SOUTHWARK

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Ref: FT/2/1239

Two ambitious qualified accountants are required to manage the authority's audit service.

Total placed expenditure is estimated to exceed £200m for 1980/81, therefore providing an excellent opportunity to make a valuable contribution towards the financial management of the authority.

Attributes sought will be a sound financial background with previous audit experience and an ability to motivate staff and communicate clearly and effectively on complex financial issues.

For further information and job description, please contact Mr. R. Coomber, Assistant Borough Treasurer, on 01-237 6677 or telephone 01-701 2879 any time for an application form, or write on a postcard to: The Personnel Officer, London Borough of Southwark, 27, Peckham Road, London SE5 8UB. Please quote appropriate reference number and job title. Closing date: 14.4.80.

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South of England

Salary in the region of £10,000

The Trustees of a substantial group of family trusts wish to appoint an able and experienced Chartered Accountant to be responsible for their overall accounting operations under the direction of the General Manager, who is himself a Chartered Accountant.

The Trusts assets include town and commercial property and agricultural land holdings.

The position will include supervision of the Accounts Departments dealing with the trading entities of the estates, maintenance of the requisite financial controls and the preparation of financial information for the Trustees, including accounts and budgets.

Applicants should be mature and used to working largely on their own initiative. The position, whilst London based, will involve regular and frequent travelling within the United Kingdom in relation to the various interests of the Group. A company car will be provided.

The successful applicant, who can look to a secure future with an expansionist minded group, will preferably live in the Home Counties, West of London.

Write with full details and experience to:

Mr. M. E. Hatch,  
Safferys,  
16, St. Martin's-Le-Grand,  
London EC1A 4EP

## ACCOUNT EXECUTIVES

The London subsidiary of a leading NYSE member firm requires two Account Executives, one with fluent Farsi. Both must be Registered Representatives - NYSE, with comprehensive knowledge of and experience in all aspects of U.S. and Canadian securities markets, commodities and Eurobonds. Candidates should have at least 10 years' practical experience, or be university graduates with 4 or 5 years' practical experience. Salary c. £10,000-£15,000 p.a. with usual fringe benefits. Please write, in strictest confidence, enclosing curriculum vitae to Box A.7095, Financial Times, 10, Cannon Street, EC4P 4BY.



## Property Investment

SCOTTISH  
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AND LIFE ASSURANCE  
SOCIETY

Edinburgh

Over £10,000

With funds under management of over £1,500 million, the Scottish Widows Fund is widely regarded as a leading Life office. Property plays an important role in its investments and an appointment is to be made to strengthen further this department. The role is the identification and assessment of potential property investments in order to develop further the portfolio of commercial and industrial properties. This will involve the extension of contacts in the property world and could extend to property development. Candidates, male or

female, aged 30-35, should be qualified to RICS or equivalent and must be able to demonstrate at least five years' experience of property investment work in one of the major partnerships or in a financial institution. The ability to take a broad view in assessing propositions will be looked for. An attractive salary will be negotiated to attract the calibre of candidate required together with a generous house mortgage scheme, non-contributory pension scheme and other benefits.

(PA Personnel Services Ref: PF45/7280/FT)

Initial interviews are conducted by PA Consultants. No details are divulged to clients without prior permission. Please send brief career details or write for an application form, quoting the reference number on both your letter and envelope, and advise us if you have recently made any other applications to PA Personnel Services.

### PA Personnel Services

Hobart House, 80 Hanover Street, Edinburgh EH2 1EL Telephone: 031-225 4461. Telex: 72356



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## Treasury Executive

c. £10,000

Due to internal promotion, the opportunity has arisen for you to develop your expertise within an International Petroleum Group.

This will not be your first responsible job and, although aged under 30, you will have already proved that you have the mental ability, judgement and stamina of a successful Treasury Executive with either a multinational corporation or an international bank. You will look forward to widening your foreign exchange dealing and money market expertise with one of the largest commercial participants in the London market

in our Victoria based Treasury group. Your major responsibility will be day to day international cash management of Occidental's European and African activities, including the North Sea where Occidental is a major operator.

There are attractive international career prospects within Treasury and other areas of the Occidental Group.

Please send brief curriculum vitae (which will be treated in strict confidence) under reference "O.F.A.L." to: Martyn Hawkins, Occidental International Oil Inc., 16 Palace Street, London SW1E 5BQ.

OXY

## Financial Analyst

West London

for the rapidly growing, £50 million turnover operating company of a highly successful \$8 billion U.S. Consumer Goods Group.

The post will include investigations, capital and revenue budgeting and control reporting and special studies especially in marketing and other commercial areas.

Candidates, male or female, should be aged up to 30 and have relevant experience, ideally in F.M.C.G. and be M.B.A.'s or Qualified Accountants. This is an opportunity to join a leading Group where international career prospects are outstanding.

Salary will be £8,500 plus car with good fringe benefits.

Please telephone for an application form or write in complete confidence to Mike Hann, who is advising on this appointment, quoting reference 1118.

Oggers

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London W1X 3TD 01-499 8811

## Financial Controller

up to £15,000+car

Kelly Girl Service Ltd, the rapidly expanding UK subsidiary of Kelly Services Inc. one of the world's largest suppliers of temporary help, wish to recruit a Financial Controller who will be located at the company's UK head office at Kingston upon Thames.

The Financial Controller will report to the Group Director - European Operations and be responsible for all aspects of the finance and accounting functions for the company. Special emphasis will be placed on improving the quality of management information, and in particular to ensure that financial resources are properly planned and controlled.

Suitable candidates will be qualified accountants, with a record of achievement in senior financial management, preferably in an expanding environment. They should offer practical experience of planning and budgetary control, and the design and implementation of modern financial procedures.

The position provides a challenging opportunity for career development. The commencing salary will be negotiated at up to £15,000 pa and a company car will be provided.

Candidates, male or female, can make application by quoting reference MCS/2088 and requesting a personal history form from Michael R. Andrews, Executive Selection Division, Southwark Towers, 32 London Bridge Street, London SE1 9SY.

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## POTENTIAL GENERAL MANAGER

able to be responsible for its operation  
IN NIGERIA

He will, from the start, promote the commercial policy and supervise the branch Managers as well as the Product Group Managers.

Experience in AFRICA required, preferably in English speaking countries.

Should be at least 35 years old.  
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Residence LAGOS.

Send handwritten application with résumé quoting reference E.13.846.

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## FOREIGN EXCHANGE DEALER

A career opportunity exists within a recently established London Branch of an expanding mid-American Bank for an experienced Foreign Exchange Dealer. Applicants in the age group 25/35 should have a minimum of 3 years' dealing experience in FX/Deposits including Arbitrage. Salary negotiable.

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### SENIOR ACCOUNTANT-STOCKBROKER

26-32

ACA

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Our clients, a major firm of Stockbrokers, will shortly appoint a Senior Accountant whose responsibilities will include:

- ★ Balancing and posting of private ledger
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The ideal candidate will be a Chartered Accountant, who should preferably have worked in the finance sector, ideally with another stockbroking firm. He/she will need to have absolute integrity, and qualities of discretion, to deal with a variety of complex financial and internal matters.

Career  
plan

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Please apply to: Jack Coutts  
Career Plan Ltd., Chichester House  
Chichester Road, London WC2A 1EG  
Tel: 01-942 5775

## Divisional Financial Controller

(25-28: INDUSTRIAL BACKGROUND)

to £12,000

ENFIELD, MIDDLESEX

As a result of continuing expansion and as part of the overall strategic plan, a sub division of a highly successful international group is seeking a positive minded and organized Qualified Accountant. The successful candidate will be expected to provide financial support & advice to local senior management colleagues and have the ability & confidence to participate in decision making with the General Manager. Responsible for a stable support team, regular duties will include statutory & monthly management reporting, budgets & forecasts, W.I.P. valuations and the ongoing development of real time accounting & production control systems.

Career prospects are excellent and opportunities exist throughout the entire group.

## Young Business Minded ACA

(DIRECTOR MATERIAL)

£11,000 - £12,500 + Bonus

ISLEWORTH MIDDLESEX

A determined & ambitious Accountant with 2 years post qualifying experience is to be appointed by this international company which has sustained one of the most remarkable growth rates over the past 10 years, and continues to return record profits.

The role is demanding and requires the strength of personality to negotiate & influence at all levels within a multi-discipline environment.

The appointed candidate will have total responsibility for the production of annual budgets & plans, monthly rolling forecasts, capital expenditure & project appraisals, pricing, performance analysis, development of computer systems & financial models, whilst assisting the U.K. Controller in the installation of a new in-house computer.

Financial & career rewards are appreciable.

Interested candidates should apply in confidence to:-

Sheldrick, Sedgwick & Goodyer

93-94 Chancery Lane, London WC2A 1DT. 01-404 0612

Senior accountancy & financial management selection

## Accounting Manager

London

Procurement

Our clients are a very large group operating internationally in the shipping, construction and oil industries. With a view to further vertical integration of services to member companies, a powerful procurement and delivery organisation has been established in London.

An interesting new position has been created for an Accountant, who, initially with a small staff, will be required to devise and install systems for the control of purchase and delivery of plant, equipment and materials on the world market for major projects of international significance.

Reporting to a Senior Manager in London, the man or woman appointed will probably be a qualified Accountant aged 30 to 45. Essential experience required includes several years in the engineering, construction or manufacturing industry. Some overseas travel occasionally may be necessary.

Applications are invited from men and women, who should write in confidence or telephone (24 hour answering service) to Charles Rich for a personal history form quoting reference R/2417.

The P-E Consulting Group Appointments Division  
1 Albermarle Street, London W1X 3HF Tel: 01-499 1948



## Senior Appointments

### ACCOUNTANT

North West London

£10,000

+ Car

Small, friendly and rapidly expanding company trading in major parts and accessories offers an ideal opportunity to join highly successful management team to be responsible for running the entire accounting function with the assistance of three staff in a computerised environment. Company secretarial duties will add to the interest of this appointment. Candidates will be 25-40, qualified with sound commercial experience. Ref: 752.

Reply in confidence to Ian Crichton.

ACCOUNTANCY PERSONNEL SENIOR APPOINTMENTS  
41 London Wall, London EC2M 5TB 01-588 5105

## HAMPSHIRE

### INVESTMENT ANALYST

£6,447-£7,125 p.a. (comparability award pending)

The County Council's pension fund is currently valued at £10m and is growing at a rate of more than £10m per annum.

A keen and enthusiastic investment analyst is required to assist in the in-house management of investments. Candidates should possess a good class degree and/or professional qualification. Relevant experience, particularly within an institutional or stockbroker's investment department would be a distinct advantage.

For job description, outline of conditions of service and application form, write to Departmental Personnel Officer, County Treasurer's Department, Hampshire County Council, The Castle, Winchester, or telephone Winchester 4411 extension 487 or 346. Completed application must be returned by 2nd April, 1980.

## Accountants

Management Consultancy

Birmingham  
Up to £13,000

WE ARE:  
One of the leading firms of management consultants in the country providing services to a wide range of clients both in industry and the public sector.

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Ambitious and imaginative accountants who can rapidly make an effective contribution to the continuing expansion of our consultancy practice in Birmingham.

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A qualified accountant aged around 30 with a good university degree and a successful track record in industry or commerce.

YOU WANT:  
The chance to broaden your experience and to put your own ideas into practice by providing effective solutions to a variety of business problems.

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We are what you want and you are what we want, find out more about us. Send a brief c.v. to Nigel Scott or ring him on 021-236 9898 during office hours for an informal discussion.

Deloitte  
Haskins + Sells

Management Consultants

Edmund House, 12-22 Newhall Street, Birmingham B3 3DX



An international group, including a Merchant Bank with substantial interests in West Africa, wishes to appoint a:-

## General Manager

This is a new appointment brought about by the building and launching of 2 new biscuit factories at Ibadan and Port Harcourt (assets £25M). It presents an unusual career opportunity for an ambitious, thoroughly professional M/D who has had overseas experience ideally in a developing country. A sound knowledge of marketing, financial management and food distribution is of importance.

Our client is looking for a manager who holds a good degree and who has the energy and tact to lead a team of various nationalities. It is a demanding appointment with Main Board potential. The position is well rewarded to suit personal circumstances and covers all accommodation, domestic staff, car, 6 weeks leave, plus schooling and usual overseas fringe benefits - together with the opportunity to build up some personal savings.

Ibadan/Port Harcourt Age 30-45 Salary circa £20,000 after tax

Our Client wishes to make an early appointment. Applicants should therefore apply as soon as possible quoting BS. Interviews will be held in London, early in April.

1 Robin R. Whalley

2 INTERNATIONAL APPOINTMENTS (LONDON) LTD

(Executive Recruitment Consultants)

Cable: Interapp, London SW1

Greener House, 66/68 Haymarket, London SW1Y 4RH Telephone: 01-839 1602K, 01-839 2831

## Director Overseas Operations

South Wales base up to £20,000

Aluminium Wire and Cable Company Limited, a leading U.K. supplier of aluminium wire and cable, wish to appoint a director to take charge of a newly created Division which will handle the overseas marketing and sales of their conductor, wire, cable and accessory products and electrical contracting business. This appointment is being made at the highest level reporting direct to the Managing Director and carries complete responsibility for identifying and evaluating markets throughout the world except U.K. and Western Europe, for preparing appropriate strategies and plans for these markets and for achieving the planned sales and contribution budgets.

The successful applicant will have several years' experience of overseas industrial Sales Management and top-level negotiating

for annual sales of at least £10 million and must be prepared to spend six months per year overseas. Experience in electrical capital goods markets and contracting, and familiarity with Spanish and Arabic commercial culture would be advantages. The remuneration package offered is in the range of £18,000 - £20,000 and fringe benefits are those associated with a top-level appointment in a large group. The successful candidate will be based in South Wales.

Please write, stating age, current salary and how you meet with our client's requirements, quoting reference DO/4077/FT on both letter and envelope. Men and women are invited to apply. No information will be disclosed to our client without permission.

Urwick Orr & Partners Limited

Management and Selection Consultants

Baylis House  
Stoke Poges Lane  
Slough SL1 3PF

## INTERNATIONAL BANKING

A leading Swiss Bank requires an experienced all-rounder for its UK organisation

The Bank seeks to expand its business development and loans supervision group, which covers various interesting and challenging fields of financing, ranging from corporate lending through trade financing to syndicated loans.

The ideal candidate would have at least five years' experience in a top quality financial institution, together with some knowledge of German, French or Spanish, although linguistic ability is not vital.

The applicant's manner and personality should be commensurate with the Bank's prestige and its calibre of customer.

The remuneration, including fringe benefits, is negotiable and will be in line with the experience and qualifications offered by the applicant.

Please reply in strictest confidence, enclosing CV, to Box No. 331, Streets Financial Limited, 18 Red Lion Court, Fleet Street, London EC4A 3HT.

## Expanding International Trading Company

### FINANCIAL CONTROLLER (U.K.)

West Midlands c. £10,000 + car

The Company: Rapidly expanding, very substantial and a world leader in specialist retailing, with pole positions in U.S. rankings for growth, profitability and return on capital plus, an unequalled record of rewards for successful management. An opportunity now exists to appoint a Financial Controller, to head the financial management of its U.K. operations, whose growth rate is above average for the group.

The Job: A member of the senior management of the Company in the U.K., with additional reporting responsibility to the U.S. based Parent Company. Responsibilities will include Management and Financial Accounting plus, management of Finance and other Treasury duties in the U.K. The data processing function should be absorbed within a year.

Qualifications: Candidates should be qualified accountants with five years post-qualifying experience including three in industrial or commercial management. Age is not a limiting factor but, the career record must demonstrate the ability to create and improve control of financial functions. University Degree and, experience in multi-national companies generally and retailers in particular, would each be an added advantage although, secondary to the basic qualities, ambitions and abilities necessary for the task.

Salary and Benefits: Negotiable, according to experience but, the total emoluments should exceed £10,000 in the first year. A car will be provided.

This is an outstanding opportunity for a first-class Financial Controller to advance his/her career by applying his/her ability in a growth situation.

Applications: Enclosing a brief c.v. to Box A.7096, Financial Times, 10, Cannon Street, EC4P 4BY. For the attention of Alastair J. MacGillivray, F.C.A.

## The P-E Consulting Group

Park House, Egham, Surrey TW20 0HW Tel: Egham 34411



## Chief Accountant Management Consultants Surrey

P-E is a long-established and successful international management consultancy. We are seeking an experienced chartered accountant for the post of Chief Accountant, reporting to the Managing Director and based at our group headquarters at Egham.

The successful candidate will have experience of controlling the financial and management accounting functions, preferably in a service company environment. An outgoing personality and the ability to relate to staff at all levels are other important qualities.

An attractive remuneration package will be negotiated, reflecting both the importance of the position and the past achievements of the candidate appointed.

Applications are invited from men and women who should write in complete confidence to our Managing Director, Len Weaver quoting reference AQ17.

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NO TAXES ON PERSONAL INCOME IN SAUDI ARABIA.

INTERESTED SEND RESUME TO

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## Controller of Economic Evaluation

Bahrain

Tax Free Salary

Gulf Air, the prestigious national airline of the Gulf States, has a rewarding opening for a qualified Accountant or Economist, to work on route cost and revenue analysis by developing an efficient computerised model to answer questions arising from changes in pricing, cost, schedules and frequencies. The successful candidate will provide economic assessment for capital projects and policy proposals and will also be involved in the development of principles and systems for route evaluation. We seek an Economist, qualified to degree standard, or a qualified Accountant with an

ACMA. Candidates should have at least three years' experience of airline cost accounting, economic analysis or planning, and experience of computerised models would be an advantage.



We offer a generous tax free salary plus the excellent range of overseas benefits to be expected of a successful international airline.

Write giving full career and personal details to The Personnel Officer, Gulf Air, Room 252, Excelsior Hotel, Bath Road, West Drayton, Middlesex.

الخطوط الجوية  
GULF AIR

## INTERNAL AUDIT

Age 24-28

To £10,000

Three major City-based international banks currently seek ambitious Auditors with previous banking experience. The requirement in each case is for a professionally qualified Banker or Accountant, with a minimum of three years' practical experience on bank audit work. A knowledge of European languages would be advantageous in two cases, as these positions involve some travel to other branches abroad.

All these appointments offer excellent prospects for future career progression and, in addition to the basic salary, a wide range of fringe benefits is available in each case.

For more details of the above positions and the many more we are currently handling, please telephone, in the strictest confidence, Mark Stevens (General Manager).

BANKING PERSONNEL

41/42 London Wall - London EC2 - Telephone: 01-588 0781

(RECRUITMENT CONSULTANTS)

## Godsell & Company Limited

Foreign Exchange and Currency Deposit Brokers

International Money Brokers

We require experienced spot yen brokers to join our expanding section

Please contact:

I. G. O'Neill, Joint Managing Director,  
Godsell and Company Limited,  
Marlon House, Mark Lane, London, EC3M 4AQ.

## INTERNAL AUDIT MANAGER

Due to a recent promotion, a small but rapidly growing multinational is looking for a professional accountant to manage its internal audit activities. The selected candidate must have U.S. corporate accounting exposure, at least 5 years in public accounting/internal audit. European language proficiency and the ability to deal with people. The position is London-based, reports to corporate headquarters, and involves a significant amount of travel.

The internal audit manager must be a take-charge individual who can continue the implementation of the corporate internal audit function, supervise the activities of the travelling audit staff, handle the reporting and administrative matters of the department, and carry out a number of field work assignments as well.

The remuneration package is competitive and there are good opportunities for the right person.

Interested candidates should send their resumes, including salary history, to:

Box A7092, Financial Times, 10 Cannon Street, EC4P 4BY

## BERMUDA

On behalf of our principals, we now wish to recruit the following personnel -

### Financial Analyst

Salary: c. \$25,000 pa  
Age: 25/35 flexible  
Insurance exp. ACA/ACCA  
Housing allowance  
Ref: 44780

### Systems Analyst

Salary: \$30,000 pa  
Age: 28/40 years  
Control of insurance  
accounting project team.  
Reporting, etc.  
Ref: 44788

### Accounts Executive

Salary: \$24,000 pa  
Age: 25/32 flexible  
Single, extrovert,  
computer exp. useful  
Ref: 44792

### Internal Auditor (ACA)

Salary: \$24,000 pa  
Age: 25/32 years  
Prof. single insurance  
experience useful  
Ref: 44787

Please apply in strictest confidence:

TREVOR M. JAMES, M.B.C.I.  
CHRISTOPHER D. STOCK  
I.P.S. GROUP (AGY.) 01-481 8111

## MANAGING DIRECTOR DESIGNATE

The London-based subsidiary of a U.S. publishing company with a major interest in presenting professional seminars seeks an experienced administrator of graduate status to understudy present managing director with a view to taking over from him in September.

Candidates should have a professional background and be about 35/45. A wide interest in legal and business matters and the ability to write effectively and to speak in public are essential.

The salary is negotiable but will not be less than £12,000 plus car and benefits. In addition, an incentive scheme will operate on appointment to M.D.

Write in confidence, with details of qualifications and career, to Box A.7087, Financial Times, 10, Cannon Street, EC4P 4BY.

## THE FINANCIAL TIMES NEWSLETTER DEPARTMENT

Seeks journalists to work on a range of energy newsletters which is likely to be expanded with new titles. Positions at editor or assistant editor level are available for qualified journalists with experience in energy or energy-related subjects. Attractive salaries and benefits, and excellent career prospects with an expanding department of the Financial Times.

Apply with c.v. to:

Peter Sabine,  
Head of Newsletter Services,  
Financial Times Business Information Ltd.,  
Bracken House,  
10 Cannon Street, London EC4P 4BY.

## FINANCIAL TIMES EUROPE'S BUSINESS NEWSPAPER

## INTERNATIONAL OPERATIONS

London c.£11,500 + benefits

Our client is a highly profitable American Corporation with world-wide interests in the energy field. Continued expansion dictates the need for the recruitment of an ambitious Accountant to be responsible for the review of operations and procedures world-wide. The successful candidate will be qualified, highly articulate and preferably have had exposure to U.S. accounting procedures. This appointment is regarded as a short term step to a senior line position.

Please telephone Andrew Kerr

HUDSON SHRIEMAN INTERNATIONAL LTD.  
College Hill, Chambers, 23 College Hill, London, EC4  
Telephone: 01-246 7851

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To head department. Small international merchant bank.  
£5,500

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Cull:

DELLA FRANKLIN

78 Queen Victoria Street, EC4

01-248 6071/236 0691

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M. Temple, M.A. (Oxon)  
31, 25 years' practice in Anglo-French system. Fluent English and French, seeks post with international law firm or in legal department of firm in France, Switzerland, UK, Benelux.  
Write Box G.5560, Financial Times, 10 Cannon Street, EC4P 4BY

## HEAD OF COMMERCIAL AND ECONOMIC DEPARTMENT

The Engineering Employers' Federation is seeking a successor to Mrs Judith Harper as head of its Commercial and Economic Department.

The Department contributes to the Federation's primary industrial relations activities, assists in formulating the industry's views on commercial and economic matters, is responsible for commercial liaison with Europe and provides authoritative economic and statistical information on the industry to member firms.

The Head of this Department is expected to contribute significantly to the growing representative work of the EFF, the ability to interpret and communicate complex matters lucidly to a variety of audiences is therefore necessary.

The successful candidate will be a graduate with a degree preferably, but not essentially, in economics. Experience in industry and a highly developed understanding of the economy and the role of industry within it are, however, vital qualifications.

Salary will be in excess of £13,000 plus car, contributory pension scheme and BUPA membership.

Applicants should send a c.v. to:

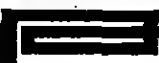
Mr E. de B. Marsh,  
Engineering Employers' Federation,  
Broadway House,  
Totter Street,  
LONDON SW1H 9NC.



## Director: Minerals Director: Metals

### £20,000 +

A major international metals-based company intends to strengthen its raw materials division with the appointment of two executive directors at controlling board level to direct its future involvement in raw materials. Extensive knowledge and experience of non-ferrous raw materials sources and trading is essential in each case. Each director will be responsible for the development and implementation of both trading strategy and also longer term commercial and financial relationships with metals and mining companies. Salaries; negotiable over £20,000, are not a limiting factor. Other benefits attractive and competitive.



#### PERSONNEL ADVERTISING LIMITED

Write in the first instance in complete confidence to Brian Page, Director, Personnel Advertising Limited, 22 Red Lion Street, London WC1R 4PX. Please name any company to which your application should not be sent, and quote ref. GRS 561.

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Robertson  
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### We're looking for an Accountant with a special qualification- Ambition

ACA, ACMA or ACCA qualified but feel your ability isn't being used to its full potential? Young and ambitious and looking for a position where your prospects can lead into European financial control? Then this is your chance to join a progressive expanding organisation, particularly if you're experienced in costing and inventory control. Our client, a major multi-national corporation engaged in the supply of advanced technology equipment, has just the vacancy you're seeking. You'll be providing a total financial and costing service to the General Manager of the service operations based in the Wembley area, and be responsible for relaying valuable management information to our professional management team. You set your sights high, so we're offering you every prospect, as under study, of becoming a Controller. If excellent promotion prospects and a salary of £8,500+ p.a. appeals to you, then write giving brief CV, and quoting Ref. T192, to Alex Murray, MCS/Robertson & Scott Recruitment Advertising Ltd., Control Data House, 179-199 Shaftesbury Avenue, London WC2H 8AZ. Please list, in a covering letter, any companies to whom your application should not be forwarded.

## Credit Analyst Up to £8,500+profit sharing

Hewlett-Packard Limited is the UK subsidiary of a £1000 million US multi-national electronics and computer company. Ours is an outstanding growth record, the rate in the UK exceeding 50% per year. We are seeking a Credit Analyst (male or female) to head our Credit Analysts Group. Ideally you will be a graduate or professionally qualified in credit control or accountancy. You will also have flair in dealing with people at all levels, be ambitious, and looking for further challenges and responsibilities. Hewlett-Packard offers you, in addition to an excellent salary, a benefits package including: Cash Profit Sharing and Christmas Bonuses Non-contributory Pension and Life Assurance Schemes Relocation expenses where appropriate. For further details and an application form contact: Mia Tritton, Personnel Department, Hewlett-Packard Ltd., King Street Lane, Wincoburn, Wokingham, Berks. Telephone 0734 784774.



**HEWLETT  
PACKARD**

## Projects Accountant

N. London to £10,500

We are seeking an intuitive, qualified Accountant, male or female and aged 25-30, preferably but not necessarily a graduate, who can fill a vacuum created by the changing demands of our client's U.K. and overseas operations. Reporting to the Financial Controller, you will use your business acumen, already developed in a fast moving commercial environment, to advise management on a broad range of key projects. These will include short/long term strategic planning, commercial evaluation of capital proposals, the design and implementation of management information systems and development of the company's computerisation plans. The company, with a t/o in excess of £20m, is a rapidly expanding subsidiary of a major group. It provides a dynamic but informal atmosphere and operates enlightened policies, which will afford the successful applicant ample opportunity for future progression within the Group. Please contact Andrew Cook, in writing or by telephone as below, or evenings/weekends on 01 997 0173. Reference: SA 120.



#### Management Personnel

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These advertisements appeared in the Financial Times on 18 March 1980

Job Title	Salary	Location	Advertiser
Young Qualified Accountant	£8,500 plus Company Car	Regent's Park London	JWT Recruitment Ltd.
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ACMA/ACCAs	Up to £10,000	—	Ms V. Crawford on 01-491 4445 (Recruitment Consultants)

For further details of these advertisements please see the Financial Times of that date or telephone Sally Stanley on 01-248 5597

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Write or Phone:

Mr. Gordon Morton (Ref. P.570)  
EVERETT MASSON & FURBY  
19 Prudential Buildings, St. Andrews, Street, Cambridge.  
Tel: Cambridge 65675/6

### PROPERTY DEVELOPMENT

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#### SEEKS EQUITY PARTNER

to inject £1,000,000 in specific projects.  
Company will provide first £100,000 risk capital.  
Write Box G.5561, Financial Times, 10 Cannon Street, EC4P 4BY

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We are a progressive group on a planned expansion programme interested in an investment in the above field. Substantial funds are available for either an outright purchase or a controlling interest: good management would be an essential factor.

Reply in confidence to The Chairman, Box G.5578, Financial Times, 10 Cannon Street, EC4P 4BY

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Apartment project owners wish to sell direct to buyers. Cash sale. Highly profitable, exceptionally well constructed and maintained. 450 unit apartment project in prime location. Houston, Texas. Bank and other references available both in U.S. and U.K. Interested party may identify their interest and financial qualifications by contacting:

K. HALL, P.O. BOX 19522  
HOUSTON, TEXAS 77024

### Investment Adviser

Swiss-British National, Early 40s, Bilingual, English, French, some German. 10 years investment experience, particularly on Gold and American markets. Seeking challenging position—preferably in Switzerland. Write Box G.5577, Financial Times, 10 Cannon Street, EC4P 4BY

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### SMALL ESTABLISHED

CARIBBEAN-BASED STEAMSHIP AGENCY/OPERATOR. Seeking additional equity for expansion of existing business & new projects. Must ideally be a large shipping or industrial group. Business established in lucrative location. Interested parties may write Box G.5575, Financial Times, 10 Cannon Street, EC4P 4BY

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WARE. Contact Productivity Unlimited, 7-9 Station Approach, Gerrards Cross, Bucks. MK23 3JL 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# PSBR: Snark or Boojum?

THERE IS a new form of nonsense abroad in the City—or rather a very old form. The latest fashion, among those who like to question whatever the conventional wisdom of the moment may be (and in itself this is an excellent habit) is to ask how anyone can possibly be sure that bringing down the PSBR will bring down the rate of interest. I have met it among economists, who can't get an equation to fit in newspapers and at luncheon parties. The City and now Boar's Head has taken the new doctrine in words of fire.

## Cranks only

"Most people have now retreated from the idea that the PSBR has any effect in controlling real activity, but they cling to the illusion that it has some impact on inflation and interest rates. Why this should be so, when it runs in the face of both logic and empirical evidence, is not clear."

From which you might think that in H.G.'s opinion the PSBR is just a number, like the dimensions of the Sacred Pyramid, of no interest to anyone but cranks. And that is precisely what they do mean, for a little further on we read:

"In a perfect world we can suppose that the authorities would set the level of public spending and would define the monetary environment that was required, but would relegate the decision on whether to finance the spending to the realms of micro-economic analysis and administrative convenience."

So micro-economists and civil servants can join the cranks.

Now this kind of thing is not only nonsense, but dangerous nonsense, and it is infecting all kinds of unexpected people, including some High Monetarists. If only the argument seems to us, we could inspire real belief in longer-term targets, or had more foolproof methods of monetary control, or whatever the favourite panacea is, we could borrow without limit, and it wouldn't make any difference at all—except perhaps to a micro-economist. So a siren song this is. We can use all the North Sea revenue to abolish income tax—or come to think of it, we could abolish income tax without even waiting for North Sea revenue. How silly we were not to notice before.

This satire on the notion may seem a little heavy-handed, but pursuing an argument to its logical conclusion is usually a good way of testing it. The fact is, unfortunately, that the PSBR is a problem, which can only be solved at a price, and it is not going to fade away, as Lewis Carroll's Snark. This Snark quite obviously is not a Boojum. Indeed, the extraordinary thing is that such an inherently absurd idea should have got around.

Then there is what I would call the Old Treasury argument, which has not been heard in Great George Street for very many years. This asserts that since the Government creates the money it needed to borrow back by the act of overspending, financing it cannot by definition be a problem. If the Government borrows less, someone else will need to borrow more. Of course, if you think in terms of a very simple economy with closed frontiers, in which output responds smoothly to changes in demand, and where there are only two kinds of asset—money and bonds—you can support such conclusions logically. If getting a little nearer to the real world is micro-economists, then long live micro-economists.

Finally, there is the absence of good equations. George Nathaniel Viscount Curzon, was once accused of claiming that "what I don't know isn't knowledge," but there is surely no serious economist who believes that anything which he cannot explain cannot exist. In this particular case, if a reliable equation for forecasting interest rates existed, it would not doubt be kept under armed guard while its discoverer got rich.

In any case, the arguments for cutting the PSBR do not rely on any simple relationship. The PSBR is a very bad measure itself, and there are many different ways of cutting it, with different effects. Those effects will depend not only on the method, but on the rate of inflation, the monetary policy regime at the time and the monetary policy itself. It is hard to measure—perhaps DCE is better, and many other factors. There is enough statistical noise here to defy forecasting, but not enough to prevent reasonable discussion. We will resume the Hunting of the Snark shortly.

THE DANCERS of dioxin, a poison appearing in some weedkillers marketed in the UK (and marked as containing 245T) were raised in Parliament last week, and highlighted in the programme "Horizon" on BBC 2 on Monday. While the content of dioxin in weedkillers on the UK market should not be more than one part in 10m, 450 times as much was contained in the "Agent Orange" used by the U.S. in Vietnam to defoliate the jungles in Vietnam.

It is now alleged that American soldiers, as well as Vietnamese, developed cancer because of exposure to dioxin. In the UK the Union of Agricultural Workers (UAW) prepared a dossier on health damage suspected to be caused by weedkillers containing 245T, the use of which has now been suspended in the U.S. The British chemical industry points out that the symptoms listed in the UAW dossier do not include chloracne, typical for dioxin.

So much for the background to the giant lawsuit now facing the Dow Chemical Company, one of the main manufacturers of Agent Orange. Ex-servicemen cannot sue the Government, and therefore claim that Dow (accused of not having warned sufficiently of the dangers) should set up a multi-million trust fund for victims. There were 3m American soldiers in Vietnam, and even the number

of possible plaintiffs is difficult to guess.

A federal judge has said that all the claims can be consolidated in one action, and an association, Agent Orange Victims International, has been formed to seek out plaintiffs. The claims will not be restricted to American soldiers; the association is also prepared to represent Australian and Vietnamese victims.

The effect of Agent Orange is not limited to those actually exposed. Children have been born with deformities similar to those caused by thalidomide, and some authorities even fear irreversible genetic harm. Although soldiers cannot sue the military authorities, the mothers of these deformed children, and the children themselves, can be expected to seek redress from the Government. Moreover, to cover itself, the Dow Chemical Company has already sued the U.S. Government, alleging misuse of the product.

Another recent swell in the tidal wave of lawsuits threatening to swamp the U.S. legal system, is the damage resulting from the use of toxic substances caused by fear that Diethylstilbestrol (DES) may have been the cause of cancer of genital organs in daughters of mothers taking the drug during pregnancy. It used to be prescribed to prevent spontaneous abortion, but since

1971 it has not been prescribed to pregnant women. In the UK stilbestrol is sold as Tamoprogene, a drug prescribed for the treatment of vaginitis. However, parents of deformed children, where the mother took the drug in pregnancy, may jump to the conclusion that the drug was the cause. In Florida, the parents of a deformed child are suing a drug manufacturer for \$10m. The U.S. pharmaceutical industry is now open to

ful drug. That decision concerns a bystander who was bit when two hunters fired their guns simultaneously. He was injured but could not prove which gun fired the shot that caused his injury. The court said that both hunters were wrongdoers and had together brought about a situation in which the plaintiff was injured. Each should absolve himself from blame if he could. One or other of the defendants was re-

sponsible parties cannot be joined as a party in the action.

If the proposed extension is accepted by the courts then a manufacturer of DES—or any other producer of medicines in a similar situation—will have to prove that it was not his product that was taken by the plaintiff's mother.

However the identity of the proper defendant is not the only difficulty faced by plaintiffs in toxic substance claims. Statutes of limitation that prevent a suit after a certain time has elapsed vary from one year to six years; but whatever the period is for any particular case it will almost certainly have elapsed before the long-term effects of a drug—or of an industrial material, like asbestos—appear.

The only hope for the plaintiff is that the starting date is not the date on which the drug is taken, but the date on which the harm is manifested. This would be the rule in England and in the U.S. Some courts do, in fact, accept it as the "discovery rule". According to at least one decision the limitation period starts to run when the plaintiff discovers, or should have discovered, the connection between his injury and the product.

But not all courts are prepared to be liberal, and in New York State, for example, it has been held that the limitation

period starts when the drug was taken, or when the plaintiff was exposed to the harmful substance. Under such a rule, a claim may be barred even before the fact of injury becomes known.

The climate of opinion is favourable to a more liberal interpretation of the law, and may have in time its effect on the judges' understanding of the liability of the manufacturer is limited by legislation. Some states have imposed an absolute limit on claims arising out of defective products, such as for example, that no claim may be brought more than 18 years after the product was first put onto the market.

The Model Law prepared by the U.S. Department of Commerce does not go so far, and speaks of a product's "useful life." But no state as yet has adopted the Model Law, and for the foreseeable future, claimants of compensation will be better off in one U.S. state than in another. The choice of the right state and court where to sue remains, therefore, one of the basic skills required for product liability actions.

\* *Malcolm J. Richardson, Montreal, Quebec, Canada, is a lecturer in law, 1985 P.D. 1, 1986.*

\* *Wigginson & McDonald 133 111*

\* *App 2d 779; 11 Thompson's Reports 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.*

## BUSINESS AND THE COURTS

BY DERRICK OWLES AND A. H. HERMANN, LEGAL CORRESPONDENT

claims from all over the world, but the claimants have a legal difficulty if the drug, like DES, was taken many years ago when it was manufactured by hundreds of different companies. So far the courts have only recognised product liability if the product which caused the harm could be traced back to the manufacturer who is sued, and this is difficult in a situation for which DES is typical.

Resourceful U.S. lawyers rely on a 1948 decision<sup>1</sup> and hope that the court will derive from it a useful analogy leading to a collective liability of all possible suppliers of the harm-

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## THE ARTS

## Record Review

## Four Quartets

by ANDREW CLEMENTS

Beethoven: The "Middle-Period" Quartets. Alban Berg Quartet. EMI SLS 5171 (three records) £15.40.

Beethoven: String Quartet in F Op. 59 no. 1. Busch Quartet. CBS 61888 £3.39.

Mendelssohn: The Complete String Quartets Volumes 1 and 2. Bartholdy Quartet. Acanta HA21 815 and HA21 966 (two records each £9.24 per set).

Haydn: String Quartets Opp. 71 and 74. Amadeus Quartet. Deutsche Grammophon 2709 090 (three records) £15.17.

There are at least as many complete sets of the Beethoven string quartets as there are major record companies, and no shortage of novitiates ready to begin the pilgrimage again. The Alban Berg Quartet does not qualify as a novice ensemble—it has already recorded a much praised series of Mozart quartets—but the present set of the three Rasmovskys together with Opp. 74 and 95 is the start of a new cycle. It promises well—the booklet that accompanies the set fulsomely compares the Berg Quartet with the Busch—but initial reactions to these first instalments are tinged with disappointment. While there are sufficient good things in all the works to rank the players immediately alongside the best quartets on offer today, they do not transcend the versions of the Quartetto Italiano or the Hungarian Quartet, to name but two of the finest Beethoven sets available.

The performances are scrupulously prepared, but there is never the suspicion of mechanical perfection being preferred to musical propriety. The opposite, indeed, on a number of occasions, when passages of dubious intonation have been allowed to stand rather than re-take a section of a movement at the risk of destroying its coherence, and when the consuming energy of the four voices is held intact to the detriment of overall contour and balance. Energy is above all the dominant characteristic of the Berg's interpretations: tempo is always fast and the attack frequently aggressive. It makes for a thrilling, physical version of Opp. 95 in F minor, and an effortlessly spontaneous Opp. 59 no. 3; Opp. 59 no. 1 is more con-

troversial. The virtuoso sweep of the first movement is superb, but its pace is unnatural: an opening tempo at the limit of technique and common sense is sustained through the second subject to deprive the music of any sense of relaxation. The remaining movements are more moderately judged, but the essence of the slow movement eludes them.

It is the failure to extract maximum expressive freight from the slower music in this set that ultimately prevents unqualified endorsement, and which can be demonstrated most revealing when the Alban Berg Quartet is heard immediately after the latest reissue from the Busch Quartet's recordings for CBS. The sleeves note does not provide the date of the recording, and the record label gives the first date of publication as 1949. But the Busch Quartet as heard here was disbanded in 1945, when Gosta Andreasson and Karl Doktor left, and it seems likely that this disc was one of the first the quartet made for CBS at the beginning of its contract in 1941.

Whatever the vintage, the group was still at the height of its enormous powers for these performances. The slow movement of Opp. 59 no. 1 is made a hymn of surpassing beauty under Adolfs Busch's sublime promptings, while Hermann Busch launches the first movement at a tempo which can comfortably encompass first and second themes without any disfiguring changes of gear. Compared with previous issues of their late Beethoven quartets this Rasmovsky is less likely to set renewed standards of interpretation; it remains, nevertheless, an extraordinary object lesson in the qualities of the most influential quartet of the last half century. As filler, the disc also contains a curiosity, the Minuet from Haydn's unfinished Quartet Op. 103, the only extant recording of the Busch in Haydn. In the inter-war years the Pro Arte Quartet took care of the Haydn records for EMI while the Busch concentrated on Beethoven and Schubert; this snippet, witty and joyous by turn, only emphasises our loss.

The ghost of Beethoven hovers over many of the works on the Bartholdy Quartet's compact disc of the quartets of their eponym: the two early quartets Op. 12 and 13 are here, together with

the set of three Op. 44, the F minor Op. 80, an unnumbered E flat quartet and the set of pieces sometimes grouped together as Op. 81. The music is at its strongest. When Beethoven's example is most strictly followed: Op. 13 borrows from Op. 132 its formal scheme as well as its key, but manages a comfortable lyricism and a particularly delicate intermezzo; Op. 12 (a later work than Op. 13 despite the numbering) ranges more widely among the late quartets for inspiration and lands upon Beethoven's Op. 74 for its slow introduction.

The Op. 44 works are too strenuously contrapuntal for my taste—Mendelssohn's reverential neo-classicism is not his most appealing virtue—but the F minor Op. 80 is superior stuff, a memorial to his sister Fanny, and a work in which models are discarded and Mendelssohn regains, however temporarily, an unforced personal creativity. The Bartholdy Quartet is efficient enough in all the works and the discs are pleasantly recorded. But the performances tend to eliminate differences of emphasis between quartets: there is a brisk, no-nonsense approach to the task which is not designed to bring out the best in all of the music recorded here. These shortcomings are not, however, sufficient to affect the value of what is the only integral set of Mendelssohn's quartets currently available.

The new versions of Haydn's "Apponyi" Quartets from the Amadeus need relatively little discussion; the many admirers of the group will need no recommendation from reviewers to purchase the set. As one who is relatively impermeable to the blandishments of this particular quartet, I can observe that charm is the overriding quality of these performances, particularly in the minuets and many of the slow movements. Where a more muscular approach is required, or intimacy must be replaced by extroversion, these records are less satisfying. The edge is taken off many bravura passages by tiny slips of rhythm or intonation and, forced to a weighty climax, tone nowadays tends to be wiry. It remains a peculiarly civilised display of music-making, however; the question of whether Haydn was an especially civilised composer may be begged temporarily while these records are on the turntable.



Prunella Scales and Leonard Burt

## Lyric, Hammersmith

## Make &amp; Break

by ANTHONY CURTIS

Does organisation man have a heart? If so, can it be made to beat faster at the thought of anything other than increased sales figures? What will make it stop beating altogether? These are the questions underlying Michael Frayn's black-edged comedy, a work of subtle distinction.

Organisation man is here made incarnate by Leonard Rossiter sucking away at his glasses, as he ponders his next move in the grim struggle for survival. He is the utterly dedicated sales manager of a company that makes walled partitions. The type is instantly recognisable. There is one in every thriving company. Mr. Rossiter, in a finely judged performance, gives him individuality.

He descends upon his colleagues during an international sales convention held in Frankfurt. Their love-bathed of him is what makes them all tick. We see the action from the viewpoint of his hotel suite. Samples of the product have been assembled to demonstrate to prospective clients from both East and West. This spotlit assemblage of dummy doors, reminding us always of the product, is a notion out of Feydeau

that allows Mr. Frayn some entertaining scope with his chorus of middle management and the German, Arabian and Hungarian customers they are hoping to sign up.

We learn the name of the game very thoroughly in the early scenes with these gentlemen popping in and out of the doors. They ripple along like any other comedy about buying and selling. Then, Mr. Frayn aims to take us more deeply into the nature of the company, as a structure built out of human components. He concentrates on a handful of executives, exposing the inner core of relations that exist between the boss and the boss, as well as those that exist between the boss and the Super-boss, played by Donald Morley, who may be trying to sell them all down the river.

The play has a rather long second act, where Mr. Frayn seems momentarily to lose his way as he resolves this threat, but it contains some marvellous face-to-face confrontations after the group behaviour of the first half. One, between Mr. Rossiter and his Lancashire secretary, played by Prunella Scales, with hair-do and accent to match, is

a gem. He fingers her as he might the blotter on the Boardroom table during a delicate negotiation. Another, between him and the sales force man, James Grant, who succeeds in giving a richly convincing performance, reveals a relation that has matured over decades. None of them is portrayed as being at all sycophantic to the boss. The dependence is more organic, as is shown by the interrogation of Peter Blythe, an executive with a passion for Beethoven, and of Glyn Grain, an eager salesman besotted about his family, who is also an evangelical Christian.

In the final scene, we are plunged into a world of heart attacks and corpses. Shakespeare ended one of his most topical comedies with the entry of death to break up the party, so why shouldn't Mr. Frayn? He certainly gets every assistance in these sudden shifts of gear from his expert director, Michael Blakemore. Whether audiences will warm to them remains to be seen. It would be a pity if, because of its flouting of a few dramatic conventions, they fail to respond to this highly original piece of dramatic entertainment.

St. John's, Smith Square  
After 1945

The London Sinfonietta, under the able baton of Antony Pay, gave the last of their series of five Tuesday concerts devoted to post-war music. But it was not, and must not be considered as, a finale: it was no more than a start, a first tentative—though by any measure triumphant—step towards the full-fledged role as pre-eminent performer of new music, rather than a properly-funded Sinfonietta could, would, and ought to play.

The last programme was once more an eclectic mix of manners and styles. Hans-Jürgen von Bose is the youngest composer of the series (b.1953). By his earliest work, from 1973-77, he declared himself an ally of the young German neo-romantic school—his *Three Songs* for tenor and orchestra, which I heard in 1977 in La Rochelle, were many-layered, many-mirrored, sweet sugar-sun confessions suffused with yearning backward glances. But his *Travesties in a Sad Landscape*, written for the Sinfonietta the following year and now revived, showed promise of a different, tougher fibre: a wintry landscape of icy echoes, a spare, fine-grained canvas, every line etched hard and clear—softened by a single warm breath on its final page.

John Cage's *Aria* for solo soprano was a happy interlude; or better, Linda Hirst's *Aria*—for it was her own devising and ordering, and her exuberant assumption of a dozen different vocal styles, without a trace of cynicism or side, that gave the performance such wit and point. I wish that Vivien Townley had brought as much variety and cunning to her delivery of Elliott Carter's *A Mirror on which to dwell*. Her intentions were the best; but her execution, except in the sixth and last song where the vocal palette suddenly took wing, was oddly bland and without nuance.

Henze's music, and particularly the music of the pre-political Italian idyll, is an acquired taste. It is not a current of German neo-romanticism that I am greatly in tune with: though I recognise the lyrical quality of the work, its economy of means, and its keen ear for debt and simple (if unsurprising) instrumental combination. By any reckoning his *Kommersmusik* for tenor and ensemble of 1958 is, at three-quarters of an hour, far too long, and for the light weight of its substance far too prolix. But it has passing charms, and a rather beautiful, sentimental epilogue sweetened with honey rather than plain sugar; Philip Langridge, the soloist, stirred the ingredients with conviction.

DOMINIC GILL

## Festival Hall

## Solti's Rheingold

by DAVID MURRAY

Sir George Solti's recording of Wagner's *Das Rheingold* was for many of us a revelation, not least because it supplied the first opportunity for thorough acquaintance with this most neglected link of the Ring cycle. It is long since Solti's Ring was heard at Covent Garden, and so great interest was attached to his concert performance of *Rheingold* on Tuesday. (It is repeated tonight.) All his singers were of course of a generation new since the famous recording, and the London Philharmonic had to meet the tougher challenge of live performance. Their horns and Wagner tubas did not match the unanimous substance of the Vienna Philharmonic's (in any case the Festival Hall acoustics are hopelessly un-Bayreuth-like for the *Rheingold* Prelude and its sub-sequent horn-currents), but the playing was generally of a high order, strong and instantly responsive. Wagner's full prescribed complement was laid on: the six harps sounded as well-drilled as the "aplas," and not so very different in effect.

Solti's conception of the score proved, satisfyingly enough, not to have altered in principle; other conceptions are possible, but it should be remembered that his forcefully reading set a standard for an opera long thought to be both diffuse and a little crude. His *Rheingold* is one of violent grandeur, continuously urgent and—quite properly—somewhat inhuman. It is a moot point whether that human beings appear only in its successor *Die Walküre*, or excused on the ground that Wagner's new music-drama vision needed to be tried out first on epic action with subterranean music, *Wotans* then representing a better-judged balance. Solti makes a great case for the first view, that the music is a perfectly cogent realisation of a necessarily brutal pre-human prologue to the saga.

This excellent performance missed only one or two dramatic strands. There was a masterly, ironically detached *Loge* from Robert Tear. Norman Bailey and Paul Crook repeated their justly admired *Wotan* and *Mime*, and Anne Haugland proved to be as sharp and vital a *Frau* as we know him to be a *Hunding* and a *Hagen*. Gwynne Howell (rumoured to be *souffrant*) was shaded by him: as the other

## Ballet Rambert

Ballet Rambert opened its spring season at Sadler's Wells on Tuesday night with a revival of Glen Tetley's full-length *The Tempest*. The ballet continues in repertory until the end of this week, with an additional performance on Saturday, March 22 at 2.30 pm in aid of the Royal Ballet Benevolent Fund.

C.C.

## Theatre Royal, Stratford E15

## The Streets of London

by MICHAEL COVENEY

Although the actor-manager Dion Boucicault made his reputation as a defender of author's rights and with *London Assurance* and his three Irish plays, he made his money with melodramatic pot-boilers such as this routine piece of boka. *The Streets of London* was one of many local variations on an 1857 New York piece about the down-trodden poor in the wake of a financial collapse. In 1864 it drew the town in London and impressed Charles Dickens with its vigorous use of melodramatic cliché and famous "sensation" scene in which a tenement building was burned to the ground in front of an astonished audience while a crucial document was rescued from the flames. Boucicault wrote to a friend that he could "spin out these rough-and-tumble dramas as a hen lays eggs. It's a degrading occupation, but more money has been made out of guano than poetry."

Diane Cilento's beautiful revival at Stratford East is the best thing at this address in many months. It is affectionate, restrained in its melodramatic gestures, and quite stunningly designed by Hayden Griffin and Peter Hartwell, magnificently supported by the lighting of Aody Phillips. It is the best exposition of the genre I can remember. And it is great fun.

The plot charts the decline

in fortunes of a London family, the Fairweathers, 20 years after an upright sea captain has mysteriously expired in a fit of suffocation after handing over his gold to a devious financier, Gideon Bloodgood. The crucial document is Fairweather's receipt, which Bloodgood's sidekick, Badger, retains in his grasp to exert a hold over his master. Bloodgood, in turn, traps a society gent fallen on hard times for the benefit of his socially ambitious daughter, who needs a name to gatecrash the opera boxes and Park Lane salons.

The designers place the action against a series of economically expressive cloths in the style of Victorian engravings and fill the stage with colour as the evening progresses. The London poor have an enchanting chorus number in Covent Garden (the excellent music is by Gary Carpenter and Ian Barnett) to set the mood of panic in the community. But the panic still allows for goodness to survive, as it does in the warmly caricatured family of the Puffys, led by the rubicund Patsy Byrne, who befriends the Fairweathers and are on hand at the curtain to plunge their feet into the reappropriated carpet pile.

There are hilarious scenes of double suicide attempts in a

dilapidated slum; of chance reunion among the Fairweathers as they turn to beg from each other; of dastardly retribution sought by the oleaginous Bloodgood, played with muted glee and expressive eyebrows by the excellent William Squire; and of cheers and forgiveness as Michael Carter tops a marvellously insinuating performance as Badger by sorting it all out in his newly acquired role of heroic policeman. And, on top of all that, we have the "sensation" scene to bring down the house, flames filling the tenement windows in a thrilling display of lighting effects and technical ingenuity.

A notably strong cast also includes Frank Grimes as a voice of upper-crust reasonableness, Jane Wymark as the strong-willed daughter for whom Bloodgood commits his crimes, Nicholas Smith as a pious upon retainer (explaining his plight in a very fine point number) and an impressive mother and daughter duet from Elspet Gray and Louise Rix. We are told, finally, that the value of poverty is that it opens the heart. You could hardly hear for ribald laughter as we were dispatched from the theatre with instructions to spread good will and money among the beggars of Newham.

Henze's music, and particularly the music of the pre-political Italian idyll, is an acquired taste. It is not a current of German neo-romanticism that I am greatly in tune with: though I recognise the lyrical quality of the work, its economy of means, and its keen ear for debt and simple (if unsurprising) instrumental combination. By any reckoning his *Kommersmusik* for tenor and ensemble of 1958 is, at three-quarters of an hour, far too long, and for the light weight of its substance far too prolix. But it has passing charms, and a rather beautiful, sentimental epilogue sweetened with honey rather than plain sugar; Philip Langridge, the soloist, stirred the ingredients with conviction.

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Thursday March 20 1980

# The weakness of unions

THIS WEEK'S rejection by the Union of Post Office Workers of a productivity deal which their representatives had negotiated and recommended is the latest in a series of embarrassing defeats for trade union leaders. It is becoming increasingly common for employers to reach an agreement with union negotiators, only to find it thrown out when the members are asked to approve it. This is not, of course, a new phenomenon. Union leaders cannot compel the rank and file to adopt a particular course of action; they can only persuade. But the number of recent instances where the leadership has been repudiated points to a lack of effective communications within trade unions. Unless steps are taken to remedy this weakness, collective bargaining could become even more anarchic than it is already.

## Irrelevant

The structure of British trade unions varies widely from extreme centralisation to extreme decentralisation, but there does seem to be a general tendency both for power to shift downwards and for the gap between leadership and rank and file to widen. The CBI's recent discussion document on the trade unions suggests that the TUC's preoccupation with political objectives is partly to blame. Why the TUC has gradually achieved a position of political influence, the document says, "it has become more divorced from and more irrelevant to the union membership on which this position is built".

Perhaps even more serious is the decline in the power and influence of full-time officials, particularly at the local level. Most industrial action is unofficial; the value of official support, the CBI document suggests, is often more psychological than real. In many unions, power has been devolved to the shop floor to such an extent that officials are increasingly reluctant or unable to assert themselves. The shop floor belief that the local full-time official is redundant to their needs is reinforced by the tendency of some managements to bypass official channels or to undermine the authority of officials. For example, companies make "final" offers to officials which,

if rejected by the workforce despite official recommendation, are subsequently increased.

It is not surprising that many officials prefer to act as delegates who are mandated by the membership—leaving management negotiators frustrated and the negotiating process a lengthy and uncertain one. Full-time officials, able to take a wider view than the company-based shop stewards or convenors, should provide an important element of stability in a union's dealings with management; too often that stability is now missing.

## Changes

In part the changes within trade unions reflect wider social changes—decline in respect for authority, rejection of deference, greater assertiveness by individuals and groups in pursuit of their objectives. A return to the old days when union bosses wielded almost dictatorial power over their members is out of the question. But this is not to say there is no scope for leadership. If unions are to protect the interests of their members, they have to be efficient as organisations. This means that officials at different levels have to exercise authority; that authority has to be accepted and respected.

There is a need to increase the number and to improve the quality of officials to many unions; this will almost certainly require a real increase in the level of subscriptions. At the same time the relationship between officials and shop stewards, whose position is often not formally recognised in union rulebooks, needs to be clarified.

## Interference

Clearly it is in the interests of management that the structure and organisation of trade unions should be strengthened, since it will contribute to more stable industrial relations and greater respect for procedure, firmness and consistency on the employer's part are also essential. But trade union leadership, which has been preoccupied during the past decade with fighting political battles and with warding off outside interference in their affairs, needs to work much harder at putting its own house in order.

# A firm hand in Japan

THE JAPANESE panicked in the face of the 1973-74 oil crisis and the measures then taken sent the economy spiralling downwards in an unnecessarily steep nosedive. This time the government has reacted with more confidence and calm to the combination of sharply rising oil prices and a devastating yen which could have equally caused major disruption. The further rise in the discount rate announced on Monday and yesterday's measures to temper the pace of inflation should be seen as part of the same step-by-step approach that reflects firm management.

## Risk

The background against which the measures were taken is that the yen has remained relatively stable following the support package announced earlier this month. The economy, though expected to slow down later this year, is showing unexpected resilience because exports are still expanding strongly. The government is anxious to avoid unnecessary deflation. The risk it takes in proceeding softly is that it may not be doing enough to curb inflationary expectations (and hence the level of wage demands in the Spring), or protect the strength of the yen. If that is the case then further action will be necessary.

The 1.75 per cent rise in the discount rate to a new peak of 9 per cent is far more than had been anticipated a month ago but was inevitable after the rise in U.S. rates. At that level it still seems unlikely to deter the capital investment now being planned in industries where production is bumping against the limits of capacity and which are looking to expansion—mainly export oriented industries including electronics, automobiles, chemicals and advanced machine tools. Corporate profits have been high over the last year and companies have the funds to finance much of the investment themselves. They would certainly feel the pinch, however, if competitive raising of interest rates internationally carried Japanese rates much higher.

## Exports

Over the medium-term the Government's hopes for stabilising the yen rest on a shrinking of the current account deficit (albeit still to a large figure

by Japanese standards) and an improvement in the overall balance of payments through larger capital inflows. Exports accounted for most of the growth in GNP in the third quarter of fiscal 1979 and still seems to be doing well on last quarter. The likelihood now is that the economy will expand by over 6 per cent in 1979 and is forecast to grow by 4.5 per cent in 1980. Automobiles aside, the growth in exports has so far not been in markets where protectionist pressures are strong.

On the current account the gain in exports is largely being offset by the rise in oil prices. The Government's most immediate concern is to diminish inflationary expectations. The wholesale index is currently rising at an annual rate of over 20 per cent and consumer prices at 8 per cent. Should the pressure continue upwards, the danger is that the inevitable subsequent contraction of the economy will be all the sharper. Viewed in this light the massive increase in domestic gas and electricity prices announced yesterday to bring them in line with international oil prices inevitably overshadows the modest and inflationary measures that the government has taken. Apart from the increase in the discount rate, these consist of little more than strengthening the price monitoring machinery. The Government has shrunk from cutting public expenditure in a budget which is 34 per cent financed by borrowing. Next year's budget provides for only a small increase in spending and the Government clearly felt that there was little fat to prune. The electorate firmly told Prime Minister Ohira's administration last year that it would have no truck with his proposals for a value added tax.

## External factors

Whether stiffer measures will be necessary later will largely depend on external factors beyond Mr. Ohira's control—on the level of oil prices and American interest rates. Japan's trading partners will be watching that Japan's export boom does not further threaten their own fragile economies. But amidst so many international uncertainties Mr. Ohira is right in preferring caution to the risk of precipitating unnecessary disruption.

WHEN LECTURING in the U.S. two years ago on the subject of the "British disease," I explained that the name was a misnomer. For the Americans were clearly in the process of catching the very same complaint.

The long Carter boom after 1976 reminded me irresistibly of the Heath-Barber boom of 1972-74. In both cases a temporary and unsustainable rise in output was achieved by whipping up demand against the limits of capacity and labour supply. In the U.S. two years ago, as in the UK in the early 1970s, I was met by casualistic explanations about the large margins of unused labour and capacity supposedly existing.

Equally striking are the similarities in the corrective action in the two countries. When the Callaghan-Healey package was agreed with the IMF in 1976, it did not appear all that spectacular. But it had to be seen in conjunction with earlier British efforts that year to curb public spending and limit monetary expansion.

Similarly, the present U.S. package has to be seen in conjunction with earlier policy changes. The first steps to reverse course were at the time of the international dollar support operation in November 1978. When these seemed to be faltering, they were succeeded by the Volcker measures of last October to control the monetary base. For a time these, too, appeared to falter and the U.S. Administration seemed to be going for "guns and butter" policy. But the rise in interest rates in the run-up to last weekend's package suggested that the Fed really did mean business about controlling inflation.

As the U.S. money supply is even more difficult to measure than the British, and has behaved in a still more confusing way, the best evidence of the anti-inflationary turn in U.S. policy comes from the currency and commodity markets. The dollar has risen against the mark and Swiss franc by over 6 per cent this month, and would have risen further without intervention. More impressive still has been the sharp turnaround in commodity prices—not only gold and silver, but many others such as copper, lead, soya beans, rubber, cotton and sugar. The price falls are too large to be the mere mirror image of the dollar's recovery. Most dramatic of all has been the "death of the spot market in crude oil," where last year's premium on posted prices has almost collapsed.

At current U.S. interest rates—now at last positive in real terms—it no longer pays Americans to hoard or stockpile commodities; and the effect of this in puncturing world inflation will benefit many other countries. Of course there are too many cosmetics in the U.S.

ANNUAL GROWTH IN GNP PER EMPLOYEE 1963-79  
 Percentage change each year

	1963 to 1973	1973 to 1979
U.S.	1.9	0.1
Japan	8.7	3.4
Germany	4.6	3.2
France	4.6	2.7
UK	3.0	0.3
Italy	5.4	1.4
Canada	2.4	0.6

Source: OECD

# MEN AND MATTERS

## Swedes soured by acid drops

Well-mannered as they are (to the point, sometimes, of being slightly annoying) the Scandinavians seem poised to protest again about the problem of "black snow" originating in Britain. More formally known as "trans-boundary pollution," this falls on Norway and Sweden—thanks to the prevailing south west wind—in the form of diluted sulphuric acid.

It is not a new problem, going back to the early 1950s. But the threat of London Brick Company building four 450 feet high chimneys in Bedfordshire has caused the Swedish and Norwegian embassies in London to send a sheaf of documentation off for consideration back home.

The environment spokesman at the Swedish embassy, Wanda Tornberg, who is naturally concerned about the thousands of "dead lakes" in Sweden caused by pollution, says a diplomatic initiative "cannot be ruled out."

The scheme is being carefully studied in Stockholm. "It's obvious that we make some contribution to this pollution ourselves, but we count on a large percentage coming from England and the Ruhr Valley. The acid falls down much less in the neighbourhood of these tall chimneys than it does far away. In Sweden it does a lot of damage because of the lack of neutralising chalk in the soil."

Not one to be thought unreasonable, Mrs. Tornberg says she must in fairness point out that British scientists strongly dispute the accuracy of Swedish calculations about the provenance of the pollution.

A similar sweet-reasonableness came over the telephone from Oslo, where I spoke to an official in the Environment Ministry. The papers are still being studied, but it is felt that the chimneys contravene the as yet unratified agreement made in Geneva last November about long-range pollution. "But



basically it's a British problem," the official said politely. "Perhaps we can do nothing about it."

London Brick, much exercised by the activities of a ginger group called PROBE (Public Review of Brickmaking and the Environment) is also very discreet about the effects of its £70m scheme. It will, asserts the company, be more deposited on Norway and Sweden by, among others, Eastern Europe. The British Government itself has claimed that the four chimneys will account for a "negligible" increase in the 3.25m tonnes of sulphur dioxide—nearly half from power stations—which leave Britain's shores each year for points abroad.

Missed cue

Slight of hand is clearly not one of the Carter Administration's specialties. Only recently we had a voting blunder in the United Nations, and now, I hear, admissions that Carter himself omitted a key part of his anti-inflation speech last Friday. In the wake of his dollar-



MR. PAUL VOLCKER  
 U.S. Fed Board chairman

package—such as the roundabout way of raising the Fed's discount rate. From a European, and probably also U.S. domestic point of view, it would have been better to have put more emphasis on fiscal curbs and less on interest rates and credit curbs. But having clamoured for action to protect the dollar for years—and decades—European governments can hardly expect to dictate the details of the rescue. They should now have the good grace to give the U.S. their support—or at least keep silent.

Of course there is the danger that the U.S. authorities will not persist in their present course—just as both the Labour Government and its Conservative successor in the UK went back to inflationary policies in the disastrous period between the 1973 Budget and the October, 1979, increase in MLR. We shall just have to wait and see.

But just as the periodic bouts of inflation have not been Britain's only or most deep-seated problem, the spasmodic bursts of dollar weakness are only one of America's problems, and probably not the most fundamental.

The statistical expression of the British disease for over a century has been a low rate of growth of output per head in relation to other industrial countries—and since about 1960 lower actual levels as well, as the late starters in Europe overtook the UK. Now, however, it is quite clear that poor performance of measured productivity has become at least as much an American problem, too.

U.S. productivity growth has for a long time been below that of Europe and Japan, reflecting the fact that the U.S. already used "best practice" techniques with which other countries have been catching up.

But in the last few years U.S. productivity has virtually stopped growing altogether. For a time this fact was hidden by the country's rapid cyclical recovery from the mid-70s recession, which far outweighed anything experienced in Europe. By the winter of 1978-79 some 12m more people were employed in the U.S. than at the previous cyclical peak of 1973—an increase of 12 per cent. While

indeed, the most rapidly growing sector in the U.S. has probably been that of economists analysing the reasons for stagnant productivity. Their results have, of course, proved no more conclusive than those of their British opposite numbers.

The most widely cited analysis of the reasons for the slowdown is that made by the Brookings economist, Mr. Edward Denison. Basing himself on the period 1973-76, he can account for some 1.6 per

cent of the annual productivity lag compared with 1948-69.

He explains some 0.4 per cent by "changes in the legal and human environment in which business operates." This covers the effects of regulations aiming to control pollution and protect employee safety and health, as well as the increased resources which business has had to devote to crime prevention.

Another 0.4 per cent is attributed by Denison to the fact that right up to the late 1960s, there was still a reserve of underutilised labour in farming, self-employment and family enterprises. By the mid-1970s, these gains from "improved allocation" had come to an end. Further portions of the growth loss were attributed by Denison to a miscellany of factors: the increased proportion of very young workers and women in the labour force, the drop in working hours, reduced opportunities for economies of scale as a result of the growth slowdown itself, and a slower expansion of fixed capital—Denison himself attached a very low weight to the latter.

He admits, however, that over half the shortfall is not explained. In an introduction to his calculations in *Contemporary Economic Problems* (1978) published by the American Enterprise Institute in Washington, he adds that very much the same combination of attributed and unexplained factors was at work in the rest of the 1970s as in the period to which his pilot investigation refers. Other statistical analyses, using slightly different methods also come out with about the same "unexplained residual" in the growth shortfall.

## Same factors observed

Introducing the volume just cited, the editor, Prof. William Fellner, discusses possible explanations for the half of the productivity slowdown unaccounted for by the statistical analysis. These include a slower pace of new industrial innovation, the sharp increase in energy prices, uncertainty and distortions produced by a rising and unstable rate of inflation, tax disincentives and a possible change in the work ethic. It is not an accident that many of these same socio-political factors have previously been used by American writers to explain the more recent manifestation of the English sickness.

On the tax side, the U.S. changes have been due not to deliberate Congressional legislation, but to a totally unintended progressive tax system, blind both to inflation and to real growth. As a result the proportion of U.S. taxpayers facing marginal income tax rates of 25 per cent or more rose from only 7 per cent in 1965 to well over a third by the

## U.S. LABOUR PRODUCTIVITY GROWTH 1948-79

	Percentage change each year		1948 to 1955	1955 to 1965	1965 to 1973	1973 to 1978	1978 to 1979 IV
	1948 to 1955	1955 to 1965					
Private business	2.5	2.4	1.6	0.8	-2.0		
Non-farm	2.4	2.5	1.6	0.9	-2.0		
Manufacturing	3.2	2.8	2.4	1.5	n.a.		
Non-manufacturing	2.1	2.2	1.2	0.5	n.a.		

Source: U.S. Council of Economic Advisors

late 1970s.

As far as the statistically explained portion of the slowdown is concerned, there are two major rivals to Denison's list of assorted factors. A joint paper by three other authors (in *Brookings Papers on Economic Activity*, No. 2, 1979) puts the main emphasis on a halving of the rate of fixed capital formation in the post-1973 period. The investment slowdown is attributed to a much greater rise in the price of capital than of labour. This is the opposite of what has happened in Europe and may help to explain the different unemployment experiences on the two sides of the Atlantic.

The other explanation focuses on the rise in energy prices (and can be found in an article by John Tatom in the September, 1979 *Federal Bank of St. Louis Review*). The energy price rise in his view effectively reduced the productivity of existing labour and equipment and helped to increase the cost of new plant, thus accounting for a good deal of the investment slowdown.

A refreshing antidote to all this puzzled American-style gloom and doom is provided by another Washington author, Edward Graham (in a chapter of a book with the enticing title *Technological Innovation for a Dynamic Economy* (Pergamon, 1978)). One of his arguments is that the environmental and health and safety regulations of the last decade brought real improvements to living standards, which escape the normal output measurements. The "explanation" simply says that part of the productivity slowdown was a statisticians' problem about which we may not need to worry.

Mr. Graham's other heresy is more novel. This is that recent technological innovation has been devoted largely towards new products (such as video machines) which are very difficult to take into account in any output index and may have a long-term value in excess of their market price.

A further explanation is the familiar one of the "black economy." As in other countries, there has been a growth of small-scale domestic and unregistered activity, which escapes both the tax net and the

attention of the regulatory agencies.

My own preference is for an explanation which is international rather than U.S.-centred. All the main established industrial countries have experienced a growth setback. In the 1973-78 trade cycle, IMF figures show that the growth of real GNP per person employed in the seven main industrial countries fell to an average of 1.1 per cent per annum compared with 3.1 per cent per annum in 1960 to 1973. The U.S. started out from a commanding position but with a much lower growth rate than the others. It therefore required only a common international setback to bring measured U.S. productivity growth towards zero.

## Advantage lost

The main shock experienced by most established industrial countries has been a change in the pattern of comparative advantage to the detriment of older manufacturing industries. Superimposed on this have been the energy price shocks of 1973-74 and 1979-80. The development of the black economy has been a common response to increases in taxation, unionisation or regulation which are themselves responses to a harsher international economic environment.

Thus the same forces which have reduced the Japanese productivity growth rate from 8.1 per cent to 3.1 per cent per annum over the last cycle, and the German growth rate from 4.1 per cent to 3 per cent reduced the U.S. rate from just under 2 per cent to nearly zero, where it matches that of the UK.

In a country as rich as the U.S., low or even zero growth is not necessarily a cause for tears. But we would need to worry if Western countries lost their capacity for adaptation, so that further shocks lead not merely to statistical but actual declines in living standards—not merely during a temporary recession—but for a continuing period.

Samuel Brittan

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## THE RACE FOR THE U.S. PRESIDENCY

## Campaign of overpowering negatives

BY JUREK MARTIN IN WASHINGTON



"I'VE KNOWN him for years. He's got courage. I admire a man who's got courage. He started out months ago and entered into every contest in every State and he won 'em and he lost 'em and, by God, you've got to admire a man like that. He's got a religious tone in what he says and maybe he should have a little more religion in our community. The man talks about true values. Why shouldn't we be sold on him?"

The speaker, of course, was the inimitable Richard Daley, legendary Mayor of Chicago. His words were his coronation of the then candidate, Jimmy Carter, after the Ohio primary nearly four years ago. But the political logic expressed in pure Daleyisms—that a presidential nomination is won these days by running just about everywhere—is as valid now as it was then. His sentiments could easily be lifted these days by the Republican faithful and applied to Ronald Reagan. Even his next imperishable remark four years ago—"Who said that the man who should be knighted on a white horse to walk into the Convention?"—as it was of Gerald Ford today as it was of Hubert Humphrey in 1976.

But, after allowing for the coincidence of the date, it has been Illinois, his old fiefdom which looks like the turning point in the campaign and for the fact that it was one of his successors at Chicago's city hall, Mrs. Jayne Byrne, who turned out to be a destroyer, not a maker of kings, the comparisons

between 1980 and 1976, or even any other recent election, start to wear a little thin.

In 1980, it now looks inevitable, barring the unforeseen, that the November election will pit the Democratic team of Jimmy Carter and Vice President Walter Mondale against Ronald Reagan and whoever he selects as his running mate. Both Mr. Carter and Mr. Reagan have built up such a lead in accumulating delegates for their respective national conventions and both are so well organised in the primaries and caucuses still to come that Senator Kennedy, Congressman John Anderson, and anybody else have little more than prayers left to reverse the tide. That this prospect should have been settled less than a month after the first primary in New Hampshire and only two months after the first caucus in Iowa is nothing short of remarkable, and the endless equations, volatilities and uncertainties so evident at the start of the year.

## Issue-less

But it is not simply that apparently speedy resolution of the alternatives that makes 1980 so exceptional. It is that it has been possible to arrive at this point by such a peaceful, even issue-less process, so full of negatives.

President Carter has come to the brink of the nomination by not setting a foot outside the White House. Even in 1972, when his nomination was never in the slightest doubt, President Nixon occasionally ventured forth to show the flag. Mr. Carter, to be sure, has played some discreet politics from the Oval Office, but he has, in essence, found it more convenient to wrap himself up in the flag—which comes in many colours, be they Iranian, Russian or whatever blue denotes induction.

Given that Mr. Carter is not held in high general esteem—opinions range from near-contempt along the Washington-Boston axis to surfer and intermittent though grudging admiration elsewhere—his success cannot be attributed to mere tactics or even to the existence of external crises. They stem from another overpowering negative in the shape of the public's assessment of Senator Edward Kennedy. Indeed the main reason why Mr. Carter looks forward to confronting Mr. Reagan in the autumn is his belief that enough Americans, especially those outside the hardcore right wing, hold similar negative views of the former Governor of California.

After an appalling, stumbling start, Mr. Kennedy has not, in truth, run a bad campaign. He has real issues on his side—economic, foreign and the Carter record in both areas—and, if a little stridently at times, he has enunciated them with the considerable oratorical force at his command. His staff may not be as good as Mr. Carter's (he has no-one, for example, with the same experience in the complex game of modern electoral politics as Mr. Robert Strauss, director of the Carter-Mondale effort) but it is not devoid of talent. Money has been a problem—and may ultimately be used as the excuse for giving up—but not to a crippling extent. He may rue the tactical error of siding with Mrs. Byrne in Chicago, but one city does not make a national campaign.

Mr. Kennedy has come to the edge of failure for two reasons: personal character, summed up in the one word, Chappaquiddick, but spilling over into public doubts about his marriage, public performances at his wife, Joan, have not been able to dispel; and the broader feeling that the great era of the

## THE SELECTION OF DELEGATES SO FAR

	Illinois	Won previously	Grand total so far
Carter	154	375	529
Kennedy	16	183	199
Uncommitted	2	22	24
Number of delegates needed to secure nomination			1,666

	Illinois	Won previously	Grand total so far
Reagan	42	167	209
Bush	2	45	47
Anderson	24	13	37
Uncommitted	20	17	37
Others	4	9	13
Number of delegates needed to secure nomination			998

Kennedy, the 1960s, has passed for ever and that the solutions so gloriously offered for problems then will no longer work as the country enters the much more complex 1980s.

There is great, but abstract, nostalgia for the good old days of Jack and Bobby. But the activists of that era, who brought the nation everything from the Civil Rights movement to the Vietnam War and opposition to it, are the older, greyer lawyers, civil servants and teachers of today, with so much more to lose by a return to ferment. This was graphically evident at a moving gathering of the bygone generation on Tuesday at the funeral services in New York for former Congressman Allard Lowenstein, instigator of the "dumb Johnson" movement in 1968 and the quintessential, perennial seeker of change in society, who was brutally murdered last week by a deranged former associate.

Negatives apply in good measure to the Republican Party as well in 1980. Apparently qualified candidates, like Senator Howard Baker and Mr. John Connally, failed because of what they could not do—the former to make people "out there" understand the sophisticated language and logic

manager, John Sears, who had tried to broaden the base of his appeal but had brought him defeat in the Iowa caucuses, he has gone from strength to strength.

There is in fact a great sense of déjà vu about Mr. Reagan's campaign in 1980. The familiar lines are still there: the cheating welfare mothers in Chicago; jokes about the shrinking dollar; the inequities of Government as the cause of inflation and as the barrier to the otherwise boundless energies of the free enterprise system, a perfunctory Supreme Court and State Department; generations of appeasement and retreat in the face of the Soviet threat; reminiscences of times that were probably never as glorious as he now portrays them when, as he puts it, an American could pin a star and stripes to his buttonhole and walk with impunity down any street in some far-flung country where revolution was raging. It is a litany purveyed with great affability, a sense of conviction, and considerable skill, as befits an old actor.

For his part, Mr. Anderson has found a seam of discontent with the proffered choices, but not, it appears, a rich enough one. In a way, he has decried the dissident mantle worn by Senator Eugene McCarthy 12 years ago. The young like his frankness, so do many Democrats and free thinkers. But Republicans are unpersuaded, believing increasingly, as Mr. Reagan and Mr. Bush have been charging, that he is in the wrong party. The Anderson candidacy had undoubtedly been the one refreshing element in the campaign so far—a positive among a myriad negatives—but even his limited success to date is more the product of this very difference than a reflection of public acceptance of what he is actually saying.

## Familiar

Even with Mr. Reagan himself, the 69-year-old warhorse, success is the result of saying nothing that is not music to the ears of the hard core conservative third who still, in effect, run the Republican Party. Once he shed the imposed moderation of his erstwhile campaign

has been so negative and so party interlocking that the year offers few clues about the outcome of a Carter-Reagan contest. It is clear that Mr. Reagan's chances against Mr. Carter are much better than, for example, Senator Barry Goldwater's were against President Johnson in 1964.

The country is more conservative now and Mr. Carter, beset by problems on all sides, hardly enters the battle on the tide of sympathy and popularity that LBJ enjoyed 16 years ago. Republicans are reasonably and confidently expecting big gains in this year's congressional and local elections—they may even regain control of the Senate for the first time since the 1950s.

## Poll claim

A standard part of the candidate's stump speech is that he has a proven record of being able to get Democrats and Independents to vote for him, chalking up, as he did, two big wins in California when Governor in spite of low Republican registration in the State. The claim looks good on paper but does not stand up to scrutiny so well. The men he beat in 1964 and 1968, two-time Governor "Pat" Brown (father of Jerry) and venerable Democratic leader Jesse Unruh, represented a Democratic establishment the State had, at the time, grown tired of. Moreover, California has the propensity to be out of step with the rest of the nation.

The basic electoral mathematics are very important. Democrats in the U.S. outnumber Republicans by nearly two-to-one, and Independents are as numerous as Democrats. Party disciplines and loyalties may not be what they were and the public's contempt for politicians in general may



never have been higher, but a Carter-Reagan choice is very stark. Mr. Reagan may be the one Republican candidate who can persuade Democrats and Independents actually to vote for Mr. Carter, without enthusiasm, to be sure, but as the lesser of two evils. Events overseas and at home may change this perception. So may the willingness of the Kennedy wing of the Democratic Party to swallow its frustrations and misgivings about what they see as a Republican President already in the White House.

One final point: much is being made in Washington and, according to received reports, elsewhere in the world, about the paucity of choices being offered to the American public. It is fashionable to put this down to the excesses of the party reforms of the past decade which have turned participatory democracy too much over to the people and taken control away from the wise professionals of the smoke-filled rooms who could always be counted on to produce an experienced and qualified candidate.

Perhaps the current system has become too protracted and expensive, too capable of paralysing the body politic for too long. But, as Mayor Daley said, you have to "win 'em and lose 'em" for the public to get a sense of your fibre. The alternative is the tyranny of the public opinion polls, to which the professionals pay such great attention. And it is worth pointing out that the big loser so far in the campaign of 1980 is the reputation of these polls for getting it right.

## Letters to the Editor

## Productivity in steel

From Mr. B. Ord

Sir,—Mr. P. Kille (March 17) makes the usual mistake in assuming that the question of "the order book in industry" is the responsibility of management. This is only half true. It is just as much the fault of the worker when the orders fail to materialise. The most important incentive for orders is the price of the article or material, the next is quality and then delivery.

If steel is to be produced cheaply, the absolute maximum output must be obtained per man hour. The cheaper the steel is priced, the more you will sell and the more you sell, the more jobs there will be. So long as productivity in the UK is less per man hour by one half that of the Japanese and by almost one third that of the Germans and U.S., our steel industry will lack orders. The theory that by reducing individual output one increases the job opportunities is a load of rubbish. All one does is to increase the cost and so the price which in turn reduces the order book.

At present, apart from the Italians, we produce the most expensive steel in the industry. The reason is that we take into account the enormous subsidy which the industry obtains from Government. If we could reduce our prices to equal or beat the competition it would not be necessary to cut the industry back by the amount we are at present contemplating. Management can now only do what the labour force allows it to do, not the other way round which is, of course, the way it should be.

## Joining the EMS

From Mr. K. Graves

Sir,—Professor Minford (March 14) is to be congratulated on his outspoken views on Britain's attitude to the EEC in general and to the European Monetary System in particular. There is certainly no future in joining the EMS simply as a bargaining counter in our efforts to secure a reduced budgetary contribution to the European Community. On the technical plane we should look ourselves into what is a mark-dominated bloc and lose much of our autonomy over domestic aggregates. It seems to me that in view of what has been happening to sterling over the past months, we would have been ill-advised to join anyway.

I find the talk of sterling's being "overvalued" somewhat puzzling. The tests for overvaluation are complex and subject to differences of opinion; but one ought not to subscribe to the opinion that price is the dominant factor in exports, for example.

While not enamoured of regional blocs, I admit that there may be arguments for our joining such a bloc when the time is ripe—that is when there is greater convergence of economic conditions, enabling us to come together naturally. But one thing is certain—and that is that international policies must always be tailored to the

maintenance of any chosen external standard. Floating rates have not removed this constraint. The gold standard may be dead, but it rules us from its grave.

## EEC legal system

From Mr. W. Stockler

Sir,—I would be grateful if you would kindly permit me to raise two points—one legal, one factual, relating to the article by Justinian "Wide gap separates UK-EEC legal systems" of March 10. Justinian's reading of the judgment is only one of two possible interpretations thereof. He concludes that the European Commission is entitled to make interim orders where only a prima facie breach of Articles 85 or 86 has been established. In fact, there is no reference in the judgment to prima facie breaches, and indeed the judgment is insistent on the safeguards contained in regulation 17 being observed. Not only does article 3(1) of regulation 17 insist that the Commission must find that there is an infringement of articles 85 or 86, but the judgment itself concludes that the powers which the Commission holds under that article include "the power to take interim measures which are indispensable for the effect of exercise of its functions, and, in particular, for ensuring the effectiveness of any decisions requiring undertakings to bring to an end infringements which it has found to exist." The previous paragraph of the judgment refers to the possibility of the Commission taking decisions "linked in successive stages."

My interpretation of the judgment is that the Commission must first find that there is an infringement and can then make a decision in successive stages, including interim measures. This would be entirely in accordance with the provisions of article 3(1) of regulation 17 and would, therefore, amount to what Justinian refers to as a fundamental disagreement with the Advocate-General or to a recognition of the absence of any express power.

No doubt the European Court will, at a later stage be asked to clarify the decision, but until it does so it would be wrong to draw the conclusion reached by Justinian thereon.

## Agricultural policy

From Dr. R. Pool

Sir,—Your leading article of March 17 refers to an "indefensible" common agricultural policy. I suggest the British case is stronger than that; the present CAP is illegal. I recently brought a case in the European Court to test this point. The Council of Ministers asked the Court to declare that its actions over green exchange

rates were not blatantly illegal, and the Court conducted its proceedings on this issue alone. Faced with the inevitable conclusion the Court gave its judgment on other, not previously discussed, and may I say, tendentious issues. It refused the Council its declaration of legality.

Green rates have been and are being used to provide national not common farm prices. Much of the budget problem follows from this. The Six failed to negotiate, or negotiate, terms upon which their agriculture could compete with that of Britain. The Community has subsequently failed to adopt adequate regional and social policies.

The adoption of national not common farm prices is destroying the Community not only, as your leader says, gratuitously, but also I suggest illegally. (Dr.) R. A. H. Pool, Higher Trayne, Ilfracombe, Devon.

## A switch in disciplines

From Mr. D. Tompsett

Sir,—You are right to keep discussion going on the Finiston Report by printing articles such as that by Messrs. Houlden and Hill (March 17) about the desirable content of engineering degree courses. If the Finiston committee did not find space for detailed examination of curricula, however, it was presumably because it expected that argument on these would certainly follow once the fundamental message of its report had been grasped.

Houlden and Hill sought to astonish us by recounting how someone originally trained as an engineer was able to progress to the position of financial controller of a multinational. Only in a British journal could this be found in the least remarkable, as will become clear to anyone taking the trouble to read appendix D of the Finiston report which covers the situation in seven of our leading competitors' countries. How much more amazing would be the news that someone originally trained as an accountant or lawyer had been appointed technical director of a manufacturing organisation! D. H. Tompsett, Great Cheveney House, Marden, Tonbridge, Kent.

## Development of engineers

From Mr. M. Cleor

Sir,—May I add some comments to the article by Brian Houlden and Perry Hill (March 17) on the training of engineers for management? The Finiston report has been criticised widely but it did succeed in making a great number of bodies and people start thinking about one of the most important problems of this industrial country.

One aspect which has been missed by nearly everyone is the role which senior management in the engineering industry has to play in the management development process. Some years ago, I had the good fortune to lead a small group of senior chartered engineers around Westinghouse Corporation in the U.S. as potential licensees. We were given top level treatment at all the plants visited in five cities, and a lasting impression was made upon us of the corpora-

tion's method of management development. As an example, the executive vice-president at each factory was in his late thirties. His background experience in each case was that of a university graduate and he had spent about four years on design and development, four years on production and four years on marketing (not necessarily in that order) before assuming general management responsibility.

The point I am making is that this was corporation policy and not the individual's desire for fresh fields of experience. Of course there are individuals whose of their own accord move themselves around from discipline to discipline and they are the ones who succeed, but it should be up to senior management to see that this happens as a matter of policy in their company. There are individuals whose of their own accord move themselves around from discipline to discipline and they are the ones who succeed, but it should be up to senior management to see that this happens as a matter of policy in their company.

I have always believed that person to person, the British engineer is better than his international counterpart, particularly at the beginning of his career. At the end of the day, however, he is often in a cul-de-sac due to years in one field, whereas he might have been a manager. This is not the fault of education, it is the fault of senior management. Michael Cleor, 4, Homefield Lane, Rothley, Leicester.

## Changing the setting

From the Editor, New Statesman

Sir,—We are very sorry to disappoint both "Men and Matters" (March 14) and Action Tickers but this part of the "compendium of leftist ethics" decided a fortnight ago to go to Arc Filmsetting—and any interested parties were informed accordingly. Bruce Page, New Statesman, 10, Great Turnstile, WGI.

## Computer capacity

From Mr. L. Wolters

Sir,—The blissful ignorance of Mr. Peter Kreamer (March 15) regarding the supposed infinite computing capacity of the banks would be merely amusing were it not for similar over-simplifications being made in the boardrooms of some of these august institutions.

Raw computer power is in itself useless, and the advent of the microprocessor has helped to further emphasise the absolute necessity (and dire shortage) of trained computer engineers, programmers, analysts, etc. Assuming one finds the people, it still takes time as well as money to create or enhance any computer system, so Mr. Kreamer's plastic paradise will just take a little longer to arrive. Once in this glorious future, perhaps Mr. Martin Simons (March 10) would be appeased if we all thought in terms of "debit" rather than "credit" cards. Lloyd Walters, 47a, St. George's Drive, SW1.

## Today's Events

awards, Wembley Conference Centre.

Overseas: First election of a Civil Parliament since the Civil War, Spain.

Three-day Scottish Liberal conference opens, Rothsay.

National Union of Teachers report published on Promotion and the Woman Teacher.

Mr. Cecil Parkinson, Trade Minister, Mr. Edward Heath and Lord Nelson of Stafford, GEC chairman, are among speakers at a conference on "China 1980"—the way ahead for trade after the reassessment, London.

Princess Anne, as president, presents British Academy of Film and Television Arts annual

Select Committee: Agriculture (Room 16, 11 am); and Home Affairs sub-committee on Race Relations and Immigration (Room 15, 4.30 pm).

PARLIAMENTARY BUSINESS House of Commons: Debate on EEC documents relating to the Common Agricultural Policy and the Community Budget.

House of Lords: County of Kent Bill, second reading. National Health Service (Invalid Discharge) Bill, remaining stages. Debate on Liberal motion to dis-

approve the Immigration Rules. London dollar and sterling certifi-

cates of deposit (mid-February).

## COMPANY MEETINGS

Birmid Qualeast, Midland Hotel, New Street, Birmingham, 12. Bullough, 20 Cannon Street, EC, 10.15. Coro Exchange, 2 Seething Lane, EC, 11. Drayton Commercial Investments, 117 Old Broad Street, EC, 2.30. East Anglian Water, 163 High Street, Lowestoft, 3. Greenfriar Investments, 11 Austin Friars, EC, 2.30. Penkaleen, 65 London Wall, EC, 2.30. Scottish Agricultural Industries, North British Hotel, Princes Street, Edinburgh, 12. Watson and Philip, Angus Hotel, Marketgate, Dundee, 12. Whatlings, Great Eastern Hotel, Liverpool Street, EC, 12.

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# Hit by engineering strike, TI emerges £28m lower

IN THE wake of the engineering strike taxable profit of Tube Investments in the second six months of 1979 was almost halved from £21.1m to £11.8m. This left the full-year total down from £50m to £32.2m.

In October the company warned that the dispute had caused an estimated £20m setback in profits. Though recovery in some areas was a little better than expected, the total effect, as it turned out, was broadly in line with this, the directors say.

After announcing the figures yesterday, Sir Brian Kellett, the chairman, said: "It would be foolhardy to predict this year, but the circumstances last year were exceptional. If the steel strike is solved soon we will not have suffered to anything like the degree of last year."

The policy of spending to improve productivity and efficiency rather than to continue and on cutback in spending is planned, he said.

External sales were up 10 per cent to £12.1m in money terms, but both production and sales volumes showed no growth. At the trading level profit slipped to £7.5m (£8.7m). This decline was steepened by a fall from £5.4m to £1.8m in the share of associates, interest on short-term borrowings jumping from £7.3m to £13.5m.

Domestic appliances were the only activity to produce an advance, with the contribution, before interest, moving ahead to £15.5m (£14.1m) on sales of £208.4m (£175.7m). By contrast cycles and toys fell from £8m profit to a £3.6m loss as turnover dipped to £157.1m (£158.1m).

The main contributor was again aluminium but the result here was down from £27.4m to

£22.6m on £288.4m (£228.3m) sales, while steel tube and steel activities slid to £11.8m (£21.6m) on £314.1m (£318.8m) sales and specialised engineering products from £17.1m to £11.7m on turnover of £243.3m (£223.3m).

With parent and other companies generating £4m (£3.7m) the total surplus before loan interest of £9.6m (£7.8m) emerged at £61.8m (£87.8m).

Tax for the year took £12.3m (£17.3m) leaving stated earnings per £1 share 31.5p lower at 83.5p but a net dividend of 13p lifts the total to 25.5p (£23.96p) which absorbs £15.1m (£13.8m).

After extraordinary debits of £1.9m (£1.1m), the retained balance emerged at £14.6m (£25m).

Group returns on net assets employed fell to 11.1 per cent (16 per cent) with only domestic appliances achieving an improvement.

Apart from the engineers' strike the results also reflect the impact of high interest rates, inflation and the strengthening of sterling, the directors say.

On a current cost basis along the lines of the Hyde Guidelines taxable profit dropped from £42.7m to £12.5m after £21.2m (£12.3m) additional depreciation, £22.3m (£21.3m) extra costs of sales less a gearing adjustment of £7.3m (£6m increase).

Demand generally in the UK for the tube was depressed throughout the year and some exports of commodity type products contributed inadequately to fixed costs. Reduced demand for steel was felt particularly at Round Oak Steel Works which moved into a loss.

Aluminium sales volume increased substantially with production of primary aluminium at a record level.

Profit in the Tube division in specialised engineering, products business

## HIGHLIGHTS

A spate of corporate results is headed by the preliminary figures from the second largest engineering company in Britain, Tube Investments, where profits have fallen from £80m to £32.2m. Lex examines these profits and those of British Aluminium, in which TI has a major presence. Here, profits dropped from £25.1m to £20.65m. Thomas Tilling, the conglomerate which is building a significant share of the U.S. medicare market, continues to make progress and annual profits have climbed from \$84.9m to \$91.1m. Elsewhere, Dickinson Robinson has lifted profits by 16 per cent to £27.7m. But Weir indicated strongly that there may be further upsets to come from the engineering sector. After a substantial cash outflow, mostly in the second half, the pump and desalination plant group has passed its final dividend. Bejam, the freer group, is still advancing quickly, while Molins kept profits within sight of the previous record figure.

## DRG rises by 16% demand holding up

A RISE of £1.1m to £15.5m in the second half left taxable profits of Dickinson Robinson Group 16 per cent ahead for 1979 at £27.7m, after almost-doubled interest.

Turnover of the packaging, printing and specialised engineering group also rose by 16 per cent, to £50.4m.

Mr. John S. Camm, chairman, says the advance was achieved against the background of exchange rate pressure and severe cost increases which put strains on volume and margins.

So far in 1980, he adds, demand is holding up well in the UK and overseas and although conditions will still be difficult, present forecasts indicate a further increase in earnings.

The directors' confidence is underpinned by the potential for improved performance resulting from the re-equipment programme and from the restructuring undertaken during 1979 and the early part of this year.

The net total dividend is stepped up to 8.5p (£7.81p) for 1979, with a final of 5.5p. After tax of £9m (£7.9m), earnings per 25p share are shown to have risen from 17.6p to 20.8p—33.4p in the second half and 15 per cent on a comparative basis.

The high interest rate combined with the extra requirement for cash during the middle six months of the year pushed up interest charges to £7.8m (£4m).

The chairman says margins came under pressure despite strong UK demand for the group's products in the first six months. Higher interest rates in the second half brought some de-stocking, but this was largely limited to fine papers and retail stationery.

In the UK—where trading

# Tilling raises profit 25% and pays 1p above forecast

BOOSTED BY a £12.8m contribution from new acquisitions, mainly in the U.S., 1979 pre-tax surplus of Thomas Tilling, industrial holding concern, moved ahead by 25 per cent from \$84.9m to a record \$91.1m, on sales up 38 per cent to £1.42bn. First-half profits had risen by £1.8m in 1978 after trading in the first quarter had been hit by bad weather and industrial disruption in the UK.

A final dividend of 4p lifts the total net payment from 4.818p to 7p net per share, which is 1p above the level forecast last May at the time of the 55th rights issue. Stated net earnings rose 20 per cent from 24.6p to 29.4p per 20p share.

Profits before interest and tax exceeded £100m for the first time with a 39 per cent increase to £103.6m. The improvement at the pre-tax level, however, was reduced by a sharp lift in interest charges from £9.5m to £22.5m.

Tax charge was down from £11.1m to £10.5m, after relief of £32m (£23m) mainly in respect of stock relief and accelerated capital allowances. Extraordinary debits increased from £0.6m to £3.1m and the available surplus emerged £14.6m higher at £87.1m.

Preference dividends again accounted for £0.5m, ordinary payments absorbed £13.1m (£10.3m) and retained profits amounted to £48.5m, against £41.7m.

During the year, £78m was invested in acquisitions and £66m in fixed assets, while the group's balance sheet remained strong. Share capital and reserves increased by £132m to some £445m, and net borrowings rose by £61m to £152m.

There was a net surplus on realisation of properties of £25.7m.

Net tangible assets at Decem-

ber 31, 1979 were 146p, against 120.2p a year earlier.

See Lex

which allowed the purchase of Tainton. Money from the £11m sale of Bidston is also being used to improve the company's cash position. The £543,000 extraordinary item was also related to the Bidston disposal. Prospects in the current year are not bad, particularly as reinforced concrete continues to sell well to both construction and non-construction customers. The total net dividend raised by 4.1p per cent, yields 7.8 per cent at 132p, up 4p. The p/e on a 39 per cent tax charge is 3.9.

## Hall Eng. advances by £1m

DESPITE a slowdown in growth in second-half profits, taxable surplus of Hall Engineering (Holdings) went ahead by £1m for 1979, to a record £6.3m. Turnover expanded from £77.62m to £97.68m for the full period.

And the dividend is boosted to 7p (4.932p) with a final of 3.9p.

At the interim stage directors reported a £60,000 rise in profits to £2.88m—last November they felt that following the end of the engineering dispute, results for the full year were not expected to have been unduly affected.

The year's tax charge is much higher at £2.24m, compared with £1.2m, leaving net profits down slightly to £4.07m (£4.1m)—earnings per 50p share are shown as 51.6p (43.58p) before tax, and 33.13p (33.61p) after.

Attributable balance was increased, however, to £4.6m (£3.72m), after an extraordinary debit of £543,000 (£379,000 debit), and minorities.

● comment

Hall Engineering has come through a very difficult year with pre-tax growth of almost a fifth. The improvement is based largely upon a three-month contribution from Tainton (of about £200,000) and a better showing by the group's South African interests, which account for around a quarter of group earnings. It had been the earlier disposal of the Bidston mini-mill

## London & Manchester moves ahead

A 15 per cent increase in the transfer from life policyholders' funds, together with higher investment income resulted in the net profit at London and Manchester Assurance advancing from £2.14m to £2.46m in 1979.

A final dividend of 6.5p has been declared, making a total for the year of 12.5p gross against 10.50175p.

The life premium income rose by 22.2 per cent to £47.6m and the transfer to profit and loss amounted to £2.05m against £1.79m. The general branch had a loss of £284,000 against a loss in 1978 of £77,000, but investment income rose from £608,000 to £829,000.

The Board states that adverse weather conditions, particularly in the early part of last year, denied the company a contribution from underwriting profit on its general branch account.

## Second-half setback at BACO

AGAINST THE board's midway expectations, taxable profits of the British Aluminium Company, in which TI holds a 55 per cent interest, fell sharply in the second half of 1979 to finish at £20.65m, compared with the previous year's £25.1m. Turnover, however, helped by new acquisitions, increased from £210.6m to £277.5m for the year, with overseas sales accounting for a record 32.5 per cent.

When reporting half-time profits down from £12.63m to £11.05m, the directors said they expected the second-half result to be somewhat higher than in the first period, subject to the effects of industrial disputes and the strength of sterling. In the event, profits for the second six months declined from £12.47m to £9.58m.

The year's result was hit by external and internal industrial disputes, production problems, the large rise in power costs and high interest rates.

Trading profits for the year

fell from £27.3m to £25.05m, while interest charges were almost doubled at £4.77m (£2.45m). Stated earnings per 50p share decreased by 12.4p to 36.3p, but the net dividend total is effectively raised to 13.5p (12.5p) with a final of 5p.

The company is disputing with the North of Scotland Hydro-Electric board certain charges for the supply of electricity to the Lovatgordon smelter, for which full provisions have been made in the accounts.

World production and con-

sumption of aluminium reached record levels in 1979, but stocks of primary metal fell for the second successive year.

In the UK, consumption of primary aluminium increased by 4 per cent in the 1978 level, but as the semi-fabricating industry reduced its stocks the use of metal in the products was significantly higher.

## Better year for LBC

Trading profits of the London Broadcasting Company increased by over 63 per cent from £25,697 to £42,533 for the year to end-September 1979. The company operates LBC, the news and information London radio station, and through IRL supplies a news service for the whole IRL network.

The trading improvement has enabled the company to repay all its outstanding loan stock and to reduce its losses by the end of September to £1.4m.

The directors say that during the first five months of the current year progress comparable to 1978-79 has been made and it is hoped that the company's losses will be further substantially reduced by the year-end.

## Manor National at £1.2m and paying 2.5p

WITH A rise in taxable profit from an annual £1.01m to £1.23m Manor National Group Motors finished 1979 in line with its original November forecast. Given in connection with the offer for CGSE this forecast, of not less than £1m, had later been revised downwards by £100,000 because of the then current trading conditions and rise in base leading rates.

Mr. R. A. Stoodley, the chairman, says that the company's development and expansion is



# Metal Closures Group

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	1979	1978
Turnover	520.4	457.0
Sales to customers	486.0	407.7
Trading profit	34.5	28.4
Profit before tax	23.3	18.1
Overseas	10.8	8.5
Associates	1.0	1.0
Interest	7.8	4.0
Profit before tax	27.7	23.8
Tax	8.0	7.9
Net profit	19.7	15.9
Minority	1.2	1.2
Extraordinary	2.8	1.7
Available	14.5	13.0
Retained	7.1	8.0
Reorganisation costs	7.5	6.5

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LONDON PEAK SHARES

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LONDON PEAK SHARES

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Member of the Building Societies Association. Authorised for Investments by Trustees.

### DIVIDENDS ANNOUNCED

	Current payment	Date of payment	Corre. Total	Total last year
Armstrong Equip. ....	1.01	May 14	0.88	2.6
Banrod Const. Inds. ....	2.43	April 24	1.72	3
Bejam Group ....	8	May 12	7.5*	13.5
British Aluminium ....	5	July 7	5.01	8.5
Dickinson Robinson ....	3.9	May 2	2.47	7
Hall Eng. ....	0.275	March 31	0.250*	0.727*
Hampson Inds. ....	5.48	June 9	4.02	7.35
House of Lerose ....	3.43	May 30	2.55	3.6
John I. Jacobs ....	5.2	May 13	4.55	7.05
Jones and Shipman ....	5.6	—	4.47	8.75
London and Manchester	2.22	May 13	2.22	3.62
Hugh Mackay ....	1.5	June 2	1	2.5
Manor National ....	1.1	April 19	1	2.26
Medminster ....	3.2	May 19	2.31	5.4
Metal Closures ....	5.7	May 21	5.7	7.9
Molins ....	2.8	April 3	2.08	6.08
Strong and Fisher ....	4	May 23	2.62	7
Thomas Tilling ....	2.5	April 25	1.96	4.96
Traford Park ....	3	May 15	2.6	25.5
Tube Investments ....	1	May 15	2.69	4.6
Vesper ....	1	April 29	0.83*	2.92*
James Walker ....	Nil	—	3.86	1.86
Weir Group ....	Nil	—	3.86	1.86

Dividends shown pence per share net except where otherwise stated. \* Equivalent after allowing for scrip issue. † On capital increased by rights and/or acquisition issues. ‡ Final of 2.5p forecast. § Company's correction.

### MANOR NATIONAL GROUP MOTORS LTD

#### Trading Profits

	1979	1978
Year ended 31st December	1979	1978
Turnover	£43,859	£47,179
Trading Profit (before interest)	1,911	1,641
Net Profit (before tax)	1,223	1,113
Dividends		
Ordinary—net	2.50p	2.14p
Preference—net	10.5%	10.5%

Extracts from the Chairman's Statement:

"Profits forecast exceeded."

"Group development and expansion well under way."

"Negotiations with the Ford Motor Company to develop other main dealer outlets."

"Firm base will assist to absorb future difficult trading and economic conditions."

R. A. Stoodley, Chairman and Managing Director

The Annual General Meeting will be held on Thursday 29th May, 1980, at Oxford Road, Manchester M13 0JD.

## Medminster ahead at halfway

More than doubled turnover helped push up taxable profits at Medminster, the furniture, hire/shipping and forwarding group, from £36,320 to £106,424 for the six months to December 31, 1979. Turnover was £51m compared with £24m.

Mr. John Delaney, the chairman, says profits would have been higher but for promotions concerned with the creation of two divisions, Camden Furniture Hire in London and Freight Agencies Macpak in Liverpool.

He says that the increased level of activity for shipping and freight interests appears to be continuing.

He points out that interest and bank charges were lower, £18,396 compared with £17,463, in spite of the high interest rates being charged during the period.

Mr. Delaney says the group has continued its policy of providing fully paid deferred taxation, and a substantial part of the £61,000 charge relates to deferred taxation. Last time the charge was £54,760.

The net interim dividend is 1.1p compared with 1p. In the year to June 30, 1979, the dividend was 2.25p per 10p share.

### SPAIN

	Price	%
March 19	224	-0.5
Banco Bilbao	248	
Banco Central	218	
Banco Exterior	218	
Banco Hispano	130	
Banco Ind. Cet.	265	
Banco Madrid	157	
Banco Santander	230	
Banco Urquijo	230	
Banco Vizcaya	100	
Banco Zangacosta	81	
Bregados	57.2	
Espeñola Zinc	64.2	
Fecsa	58.2	
Gal. Piedad	105.2	
Hidrovia	83	
Iberdrola	107	
Industria	54	
Peñabaz	62.5	
Sogefia		
Telefonica		
Union Elect.		

## Preliminary Announcement of Results Year to 31st December 1979

The considerable loss of profits caused by the effects of the national engineering strike has, to a large extent, been offset by the exemplary results from overseas.


A marked fall-off in customer orders, in some areas, is now evident, although there has been no recent loss of business to competition, and this, therefore, could be an indicator of a general downturn in demand.

At the moment, there are too many variables, both nationally and internationally, to enable any meaningful forecasts to be made. It is evident that 1980 will be an extremely difficult year for all industry but I believe we shall acquit ourselves well despite the difficulties.

	1979 £000's	1978 £000's
Sales	62,344	54,481
Profit before Tax	5,810	5,812
Profit after Tax and Minority Interests	4,112	3,658
Earnings per Share—new basis	20.37p	18.11p
—fully taxed	13.47p	13.47p
Dividends—Final Ordinary (proposed)	3.2p	2.8052p
—Interim Dividend	2.2p	1.9p

The accounting policy for deferred taxation has been changed and the figures for 1978 have been re-stated accordingly.

19th March 1980 John Boden, Chairman.



# BACO

The British Aluminium Company Ltd

## Results for the year ended 31 December 1979.

### Key points from the Preliminary Profits Announcement.

- \* Group turnover increased from £210.6 million to £277.5 million with sales to overseas customers at a record 32.5%
- \* Group profit before tax was £20.6 million compared with £25.1 million in 1978.
- \* Profits were depressed by external and internal industrial relations disputes, production problems, large increases in power costs and high interest rates.
- \* A final dividend of 8.0p is recommended, making 13.5p for the year.

	1979 £'000	1978 £'000
Year ended 31 December	1979	1978
Turnover	277,498	210,552
Profit before taxation	20,630	25,098
Profit after taxation	17,771	22,008
Cost of dividends	6,592	5,882
Dividend per 50p Ordinary Share	13.5p	12.5p

The full Report and Accounts for the year ended 31st December 1979 will be available after 11th April, on request to the Company Secretary.

The British Aluminium Company Ltd 7 Baker St. London W1M 1AB.



# Hoechst UK Ltd Group- how we cared in 1979

## Much ground recovered in second half

1979 was hardly an easy year for British industry.

A hard winter; the largest number of working days lost in strikes since 1926; the far-reaching effects of oil price rises and advancing world recession: all combined to create severe problems for almost all British companies, particularly in the first half of the year.

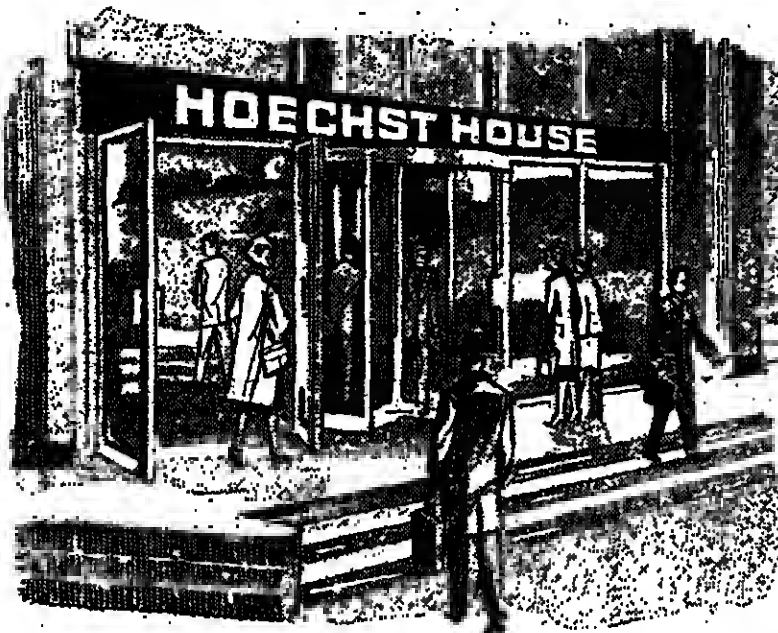
Nevertheless, the employees and management of the Group met the challenge. End of year figures show an increase in sales of 12% from £352m to £393m. High interest rates, sharp increases in raw material prices, and adverse currency movements depleted the profits particularly in the paint sector. As a result, profits before tax were reduced by 15% from £12.4m in 1978 to £10.5m.

## Our employees received special attention

The more than 6,000 employees of the Group received pay and benefits totalling £30.4m in 1979.

Employee relationships received high priority, to isolate problem areas and identify future opportunities.

Our continuing programme of training, and development of skills and knowledge, plays a major part in the careers of our employees. We know that their success will reflect positively on our strength in the future.



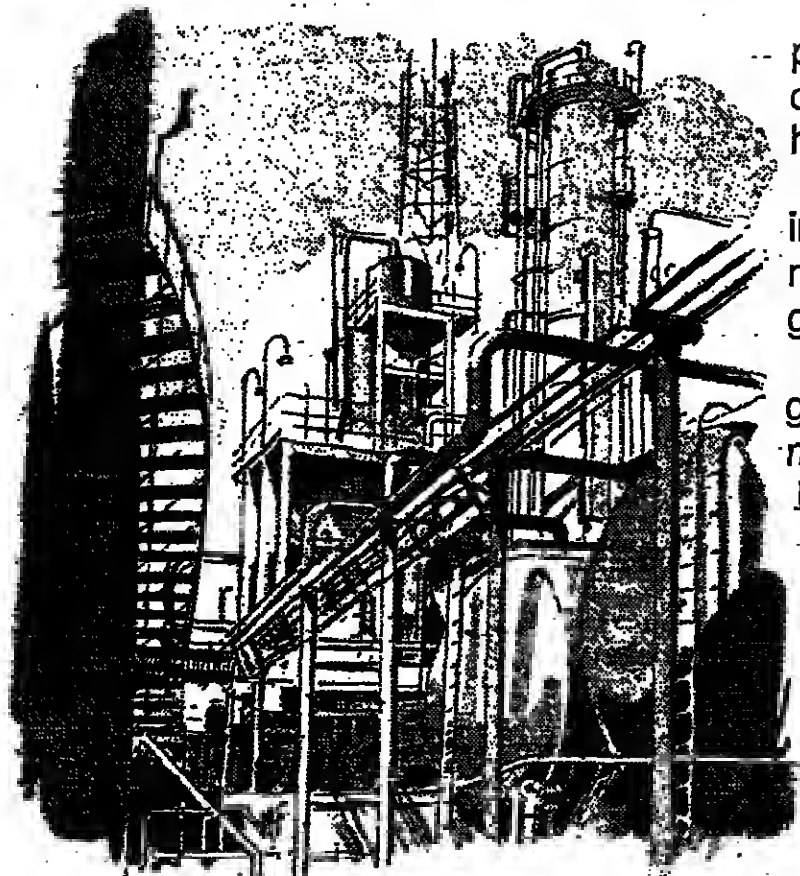
## We helped make better health possible

Despite difficult pricing conditions our search for safer and more effective medicines continued — research is the lifeblood of the pharmaceutical industry.

Frisium, our new treatment for anxiety, has been well received by doctors and we are continuing the quest for other medicines to help people stay healthier longer.



## Industry benefited from our innovations



Hoechst industrial products performed well in 1979. The general chemicals sector achieved 39% higher sales than in 1978.

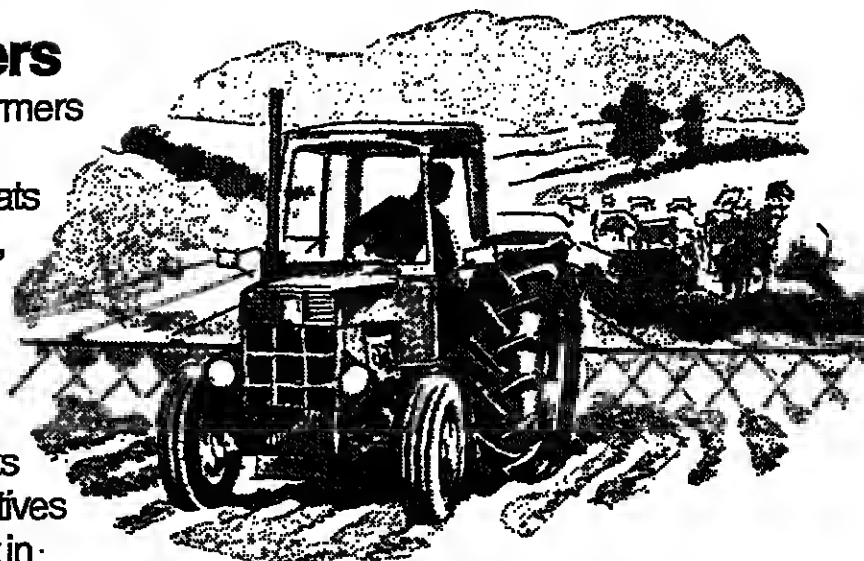
Our traditional chemical products improved their market share and many new lines contributed to the general success.

Significant contributions to the growth of our industrial sector were made by Kalle Films, plastics such as Hostalen, and micrographic products.

Other advances in printing technology, such as the Kalle Infotec copiers and facsimile transceivers, and the wide range of industrial paint products from the Berger Group helped achieve the high level of performance in this sector.

## We helped farmers

We were able to offer farmers new pesticides to improve yields. Panacur, which combats parasites in cattle and sheep, maintained its position as brand leader, and our horse vaccines proved vital in fighting equine influenza outbreaks. Our plastics, paints and Cuprinol wood preservatives also played an important part in improving farming efficiency.



## We helped create safer and better homes

A wide range of high-quality paints ushered in an entirely new era of sophisticated home decoration.

Flame-retardant fabrics, solar collector panels, and energy saving insulation materials were some of the Hoechst ideas that helped create safer and better homes in 1979.

Despite strikes and many pricing problems, the colour and surfactants groups performed well last year. Both textile and non-textile sales were ahead of budget; fibres had to face increasing and fierce competition from American imports.

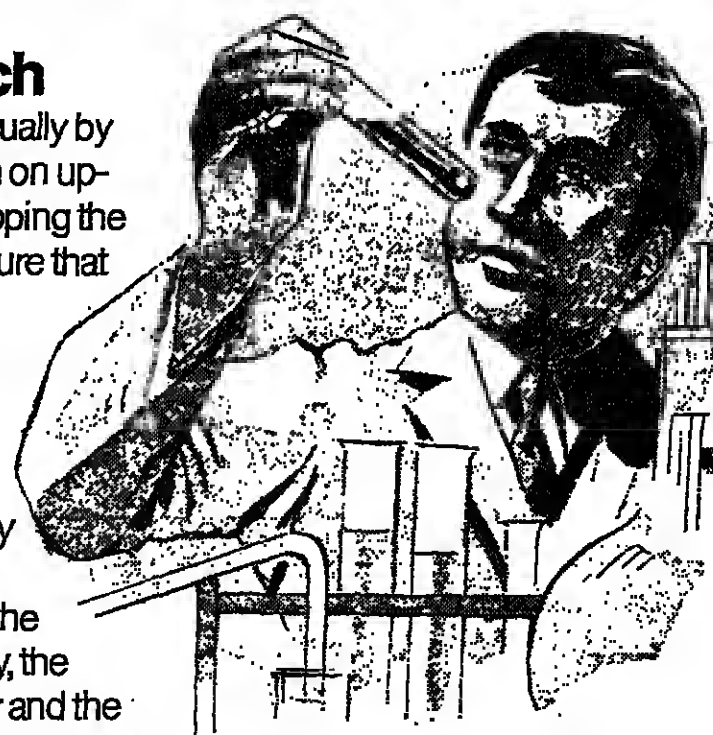


## We invested in research

Some £270 million are spent annually by the Hoechst Group worldwide both on updating the existing range and developing the next product generation to help ensure that people's standard of living is further improved. Some of this work is carried out at our Milton Keynes research laboratories.

The Group's worldwide research and development operations employ 14,000 people with 1,500 scientists working hard to solve problems like the shortage of raw materials and energy, the dangers of overpopulation and hunger and the ravages of disease.

The 30,000 patents now owned by Hoechst worldwide are helping to provide solutions to mankind's most pressing problems.



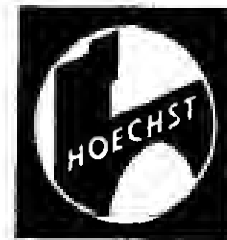
## We planned for the future

1979 showed a further increase in Group capital assets of £8.8m to underline our aim of increasing local production, both to maximise marketing flexibility and decrease our dependency on imports from countries with stronger currencies and higher prices.

Our highest priority at the present time is to make sure that our corporate resources are used in the most cost-effective manner to ensure the prosperity of the company and its employees.

For further information please write to: Isabelle Kalinowski, "Care of Hoechst", Hoechst UK Ltd, Hoechst House, Salisbury Road, Hounslow, Middlesex TW4 6JH.

# Hoechst





# VOSPER

Financial results for the year  
to 31st October 1979

	1979 £'000	1978 £'000
Turnover	11,500	17,655
Profit before Tax	1,346	1,694
Profit after Tax	733	779
Revaluation of Investments	47	771
Extraordinary Item— Reorganisation of Associated Company	299	500
Retained Profit	110	737
Earnings per Share	12.17p	12.92p
Dividend per Share	4.6p	5.19p

\* Nationalisation Compensation remains unresolved

\* As a consequence Income and Redevelopment of the Group adversely affected

\* Dividend reduced

DA A SUBSIDIARY OF DAVID BROWN HOLDINGS LIMITED

## The National Bank of New Zealand Limited

A Member of the Lloyds Bank Group

Incorporated in England under the Companies Act and in New Zealand under The National Bank of New Zealand Limited Act 1973

Excerpts from the Consolidated Accounts at 31 October 1979

	1979 £'000	1978 £'000
Profit before taxation	7,730	6,228
Taxation	3,787	2,831
Profit after tax and before extraordinary items	3,966	3,338
Current, deposit and other accounts	581,655	560,285
Total assets	641,280	610,636
Shareholders' funds at 31 October	41,808	33,855

Chairman: The Rt Hon. Sir John Marshall, G.B.E., C.H.  
General Manager: S. T. Russell  
Chief London Manager: J. D. Lee

Head Office: 170-186 Featherston Street, Wellington 1, New Zealand.  
Chief London Office: 8 Moorgate, London, EC2R 6DB.

## GB Jackson Associates Ltd

An integrated group of three companies providing advanced computing services

"We have clearly demonstrated that the company has the dynamism which is so necessary for a successful organisation in this high technology field."

Extract from Chairman's Statement, 1979

	1979	1978
Turnover	£1,465,000	853,154
Costs	£1,353,576	814,880
Profit before tax	£111,424	38,274
Tax	£32,055	21,140
Profit after tax	£79,369	17,134
Share Capital and reserves	£170,396	102,714
Earnings per share	89.7p	14.0p

Head Office  
78/77 East Street, Chichester  
West Sussex, PO18 1HL  
Telephone: Chichester (0243) 787721  
Commodity Computer Services Limited  
Four divisions providing specialised in-house and on-line computing facilities:  
1 Terminal markets and metals (futures).  
2 Physical markets.  
3 Client accounting, foreign exchange, contract and ship accounting.  
4 Nominal ledgers and management information.



JA Software Services Limited  
General software services, including feasibility studies, systems design, programming and a full range of on-line interactive packages.  
JA Computer Services Limited  
Bureau facilities for batch processing, remote job entry or on-line service. Used widely for payroll, accounting, direct mail selling and the operation of membership schemes for book, record and sports clubs.

## Y J LOVELL (HOLDINGS) LTD

MAIN GROUP ACTIVITIES: Building, Residential and Commercial Developments, Plant Hire, Timber Importers and Merchants

Another Record Year

SUMMARISED RESULTS

	1979 £'000	1978 £'000
Group Turnover	105,008	62,670
Profit before Taxation	2,615	1,724
Profit after Taxation	2,235	1,724
Profit attributable to Shareholders	395	299
Ordinary Dividend 575p per share (1978-435p)	37.1p	24.9p

Extract from Address to Shareholders by Sir Peter Trench  
"The Group finished 1979 in fine style with record profits and a strong balance sheet, and ready to repeat the performance in 1980."

"The picture in the market place is not currently, however, a happy one with high interest rates and demand for construction services continuing to fall. The delayed settlement of the steel strike will also add to building costs long after the stoppage is forgotten."

"Nevertheless, we still believe that there will be good opportunities available for a Group such as ours and we have every intention of taking them. We remain hopeful that 1980 will not be an unsatisfactory one for the Lovell Group."

## Companies and Markets

### MINING NEWS

## Palabora seeks to cut its fuel costs

BY PAUL CHEESBRIGHT

PALABORA MINING, the South African copper producer in the Rio Tinto-Zinc group, is studying a system of overhead electrical trolley lines to assist haul trucks at its open-pit mine in a bid to check the effects of sharp rises in fuel costs.

The move reflects deepening concern among mining companies about higher fuel costs. Palabora last year faced what it called yesterday a "dramatic escalation" in fuel prices of 225 per cent.

Palabora's case is probably exceptional in the sense that the South African authorities have imposed levies to protect the national fuel situation. Fuel cost increases among U.S. mining groups last year are estimated, by contrast, to be about 20 per cent.

Haul trucks at Palabora—75 of them with capacity of 90 or 150 tonnes—currently consume more

than 55m litres of diesel fuel a year. This consumption will increase as the mining rate increases and the pit becomes larger. Mr. G. A. Macmillan said in his annual statement.

However, there are preliminary indications that trolley assistance for trucks from overhead electrical lines and the conversion of haul trucks could effect "substantial savings," Mr. Macmillan went on.

Earlier moves to hold back fuel costs at Palabora have included the introduction of a computerised control system for haul trucks. This ensures that the trucks automatically go to the shovel waiting to provide a load. The search for the maximum utilisation of equipment is going

on through the RTZ group and is part of the wider industry effort to check rising costs. A computerised truck control system Bougainville Copper, the RTZ has also been introduced at group producer in Papua New Guinea.

Copper producers are likely, however, to be shielded to some extent from rising costs by the state of the market.

Noting the rundown in the level of London Metal Exchange stocks, Mr. Macmillan said: "This seems to indicate that demand for the metal has not diminished as was predicted due to an impending recession and could be developing."

Palabora last year had net profit of R44.29m (£23.4m) and distributed dividends of R11.5 a share. The shares in London yesterday were unchanged at 63p.

## Unicorp shareholders accept

SHAREHOLDERS OF Unicorp Corporation voted almost unanimously in favour of a complete merger with General Mining at a meeting in Johannesburg yesterday.

Unicorp Corporation will now become a wholly-owned subsidiary of General Mining, subject only to the approval of the Supreme Court, which is expected to be granted next Tuesday.

The combined forces of the two groups will create South Africa's second largest mining finance house with assets of R2,700 (£1.5bn).

The merger represents a significant move forward by African financial interests towards winning a large role in the South African mining industry, dominated by Mr. Harry Oppenheimer's Anglo American Corporation and De Beers Consolidated Mines group of companies.

General Mining gained majority control of Unicorp Corporation in 1979 and last December announced it was bidding for outright ownership, offering Unicorp shareholders 30 General Mining shares for every 100 Unicorp Corporation shares.

This deal was accepted by 97.3 per cent of Unicorp Corporation shareholders. A total of 1,360 shareholders voted; 14,355 votes were cast in favour and 391,246 were cast against.

Although there have been reports from Johannesburg in recent weeks that dissatisfaction with the merger terms was growing, opposition to the merger at the meeting was scanty with, it is said, only two shareholders querying it.

At a meeting of General Mining

shareholders, a 30 for a 100 shares rights issue at R14 a share to raise R180m was approved. In London yesterday General Mining shares were 750p and those of Unicorp were 580p.

### FALCONBRIDGE REORGANISES

Falconbridge Nickel, the second largest of the Canadian nickel groups, is planning a capital reorganisation, it was announced yesterday.

The directors will also ask shareholders for approval to purchase the company's own issued shares.

The main shareholder in Falconbridge is McIntyre Mines with 37 per cent.

Subject to the approval of shareholders, it wants to reclassify its "A" and "B" convertible shares of no par value to common shares of no par value, to increase its authorised capital to 25m shares from 7m, and to create an additional 7m preference shares of C\$25.

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## Horizon passes £3.8m and proposes restructuring

SECOND HALF pre-tax profits of Horizon Travel, air holiday operator, rose from £2.61m to £3.32m and resulted in the figures for the year to November 30, 1979, increasing by £0.86m to £3.82m. Turnover jumped from £31.27m to £50.18m.

Stated earnings per 5p share are 30.36p (26.1p). The final dividend of £0.155p to £0.155p to £0.155p, making a total of 7.35p against 5.64p.

Tax charged was £2m (£1.58m), leaving net profit up from £1.39m to £1.81m.

The Board proposes a restructuring of the Horizon Group in which shareholders would exchange their shares in Horizon for equal holdings in a new group holding company.

The principal objective of the proposed restructuring will be to

create an organisational framework more appropriate to the group's enlarged and more complex activities.

The tour operating company, which will be renamed Horizon Holidays, would be left to concentrate on its major activity of providing inclusive holidays. Horizon Holidays, Orion Airways and Vento del Bancel, the Spanish hotel company, together with certain other group companies, would become wholly-owned subsidiaries of the new holding company, to be known as Horizon Travel.

● comment  
Despite unfavourable currency movements and heavy start-up costs for the new airline, Horizon has turned in a solid performance for 1979 and the shares rose 11p to 265p. At this

level the historic P/E on the actual tax charge is 8.5 while the yield is 4 per cent. Although this may be a fair rating on current trading, it may disregard the earnings in store from capital allowances on aircraft acquisitions—a factor which raises the question of possible re-rating. This aside, the immediate trading position looks secure enough. Current bookings at 218,000 already outstrip the number of passengers carried for the whole of last summer and the projection is for an overall increase of more than a fifth. However profits are unlikely to maintain their recent impetus as load factors are not expected to match last year's high levels and, because of the aircraft purchases, the company will not be able to take advantage of current interest rates.

## Jones & Shipman £0.38m off

THE ENGINEERS' dispute hit A. E. Jones and Shipman in the second half as expected, and profits for that period fell from £1.8m to £1.27m. This left the pre-tax surplus for 1979 lower at £2.54m, against £2.92m.

Turnover of the group, which makes high precision machine tools, improved from £16.96m to £18.5m.

The net total dividend is increased from 6.4p to 7.05p, with a 5.2p final. A one-for-one scrip issue is also proposed. After a considerably reduced tax charge of £7,000 (£1.3m), stated earnings per 25p share are up from 26.9p to 30.3p.

● comment  
Jones and Shipman might well have done about £0.5m better at the pre-tax level had it not been

for the engineering strike. The other main reason for its 13 per cent fall in earnings stems from disruption in production associated with its £1.8m capital expenditure programme. Over the past year, with about £400,000 worth of Government aid, the group has been doubling its surface grinder manufacturing capacity and improving its plant and machinery. The move seems worth while in view of the fact that the order book is solid for the next 10 months. Although it sells to a broad spectrum of companies, the group is able to maintain sales because about 45 per cent of its machine tools are exported to Government, the Far East and North America. Also, its grinding machines are a staple tool for many UK companies. The total net dividend is up 10 per cent and yields 7 per cent at 165p, down 5p. The P/E on actual tax comes to 4.7.

The extraordinary items comprised the write-off of goodwill amounting to £17,970 arising on consolidation, and reorganisation and compensation costs of £2,548. Earnings per 10p share are shown as 1.3p, compared with 0.19p loss. As a result of last year's rights issue net assets have increased from £47,120 to £319,045, as at December 31, 1979. A further £53,000 ordinary shares were issued at a premium earlier this month which will rank for the 1979 dividend.

## Upsurge for Trafford Park Est.

FOR THE half year ended December 31, 1979, Trafford Park Estates has shown an advance in profit from £547,192 to £705,409. Turnover rose by nearly £0.5m to £2.08m. The interim dividend is raised from 1.9518p to 2.25p net per 25p share; the final for 1979-70 was 3p. After tax of £312,919 (£206,000), attributable profit for the half year came out at £373,992 (£325,088). Most of the Trafford Park group is engaged in the development of industrial and commercial properties. The rent roll in 1979-70 accounted for 98 per cent of profits.

### W. Goodkind

On lower turnover of £421,510 against £424,155 W. Goodkind and Sons, fur manufacturer, announces a turnaround from a £2,546 loss to profits of £21,759 at the pre-tax level for 1979. Also the company is returning to the dividend list with a nominal 0.05p net interim, the first payment since 1974—in February the directors forecast not less than 0.15p for 1980. However, there was a tax charge for the year of £1,515 (nil), and an extraordinary dividend of £26,518 (nil), leaving a loss of £6,274 (£2,546).

## BIDS AND DEALS

### Forward Trust stake in finance side will cut Cowie borrowings

Forward Trust, the Midland Bank offshoot, is taking a 50 per cent stake in the finance division of T. Cowie, the Sunderland-based motor dealer, for £1.5m cash. The deal will result in a substantial cut in Cowie's borrowings.

This deal with Forward, Midland's instalment credit leasing and factoring subsidiary, follows the sale by Cowie in December of Red Dragon Securities, its banking subsidiary, to Ayco Financial Services for £2.2m cash.

The purchase of the stake in the finance division comprising Cowie Contract Hire, Broxton Finance Company, and Cowie Lease) will be achieved by Forward subscribing for new shares in a company to be renamed Cowie Financial Services. CFS will have acquired Cowie's finance division which is involved in vehicle contract hire, hire purchase and leasing.

Forward has undertaken to provide CFS with future finance facilities to meet planned growth at favourable rates of interest as compared to present borrowings.

The profit before tax of the finance division for the year ended September 30, 1979, amounted to £364,000, after deducting management charges of £50,000. This compares with a

total group pre-tax profit of £2.1m.

T. Cowie, the chairman, considers that the present earnings of the group will not be adversely affected by the restructuring of the finance division. The reduction in the share of the division's earnings will be compensated both by interest on the proceeds and by the significant reduction in future interest costs resulting from the Forward financing facility.

The chairman said that although the division had achieved substantial earnings growth in recent years, its operations had been restricted because of the need to limit overall group borrowings.

Cowie is selling the finance stake at net asset value and in return will receive a dividend of £790,000 and the balance of the consideration by the repayment of inter-company loans.

The external borrowings of the finance division amounted to £8m at September 30, 1979 and since CFS will cease to be a Cowie subsidiary, overall borrowings of the group will be substantially reduced. Including the Red Dragon sale, total group borrowings will have been cut back by £16m, with net assets per share rising from 77.4p to 85.8p.

These de-gearing moves are

widely thought to be a prelude to a bid for George Ewer, the motor coach operator, whose stock are in London's Victoria Square. Ewer has built up a stake of 29.99 per cent—just below the level which would trigger a full bid under the takeover rules.

NORFOLK CAPITAL SELLS TWO HOTELS  
Norfolk Capital Group, headed by Mr. Maxwell Joseph who also chairs the Grand Metropolitan group, is selling two more of its London hotels.

This time, the buyer is Mr. Nazmur Virani. Earlier this month, it was announced that Grand Metropolitan had sold five London hotels to the private Chrysantha company for £10m. Chrysantha is also paying Norfolk £750,000 for the Eros Hotel in Piccadilly.

Norfolk is selling the Eccleston Hotel and the Southway Hotel, both freeholds, for £2.7m cash. Both are in London's Victoria district, where Mr. Virani already owns hotels.

The Eccleston is being sold as a going concern along with a leasehold property in Eccleston Square used partly for staff accommodation. The Southway is used as a staff hotel. The total book value is £2.55m, and net trading profits and rent receivable was £205,600 last year.

## French concern paying £6m for RTZ Chemicals offshoot

RTZ CHEMICALS is to sell its Sterling Thermoplastics subsidiary to Ato Chemical Products, part of the French-based Ato Chimie group, at an estimated price of about £6m.

RTZ Chemicals, part of Rio Tinto Zinc, acquired Sterling Thermoplastics last year when it bought United Sterling Corporation. But it said yesterday that Sterling, which produces polystyrene at Stalybridge near Manchester, did not fit in well with the rest of its businesses.

Polystyrene is plastics raw material used in the making of such items as refrigerator linings and food containers. Most of the products acquired under the United Sterling deal were more specialised and included plastic moulding materials and coated papers.

Ato said the deal, which is subject to approval by the appropriate authorities, was in line with its policy of extending its manufacturing capacity internationally.

which will take effect from April 28.

Capel-Cure has been reorganising its operations outside London and will concentrate its Scottish business in its Edinburgh office. McAnally, which had its origins in Scotland, has traditionally enjoyed a significant business with Scottish institutions and private clients, as well as long associations with Northern Ireland, and the purchase provides a focal point for that business.

Yesterday, Mr. Peter Ennor, chairman of McAnally, said the move could be seen as the first in a series of planned expansions.

### U.S. DIRECTORS INCREASE SHARES IN CHANGE WARES

The shares in Change Wares held by Mr. Geoffrey Rose, the former chairman, have been acquired by Mr. B. A. Selzer and Mr. D. J. Sullivan, the two U.S. directors on the reconstructed board.

The two directors, as general partners of Page Mill Group (where they have an equal interest in the partnership), have purchased 50,000 Change Wares ordinary at 8.5p and 650,000 12 per cent convertible preference at 9.285p.

The ordinary closed 1p lower at 6p yesterday.

This purchase takes the holding of Page Mill to 468,975 ordinary and 1,473,047 preference.

Mr. Rose resigned from the Board in January along with five other directors in what was described as an amicable

parting. He joined the group in July 1977 just after it had plunged into losses for the first time since it went public in 1970.

In 1978-77 the group had a loss of £885,000 but last year it had a pre-tax profit of £515,000. In the first half of the current year profits have increased from £280,000 to £326,000 but the

directors have said that the figures are not indicative of the results for the full year.

### ROWLAND INCREASES LONRHO STAKE

Mr. "Tiny" Rowland has bought another 250,000 ordinary Lonrho shares (0.12 per cent of the capital) at an average price of 90p per share. Together with the 32,226,545 shares in which he is already interested, including the voting rights which he controls over the 5,000,000 shares held by Mr. Daniel R. Ludwig, Mr. Rowland now controls 15.01 per cent of the voting capital of the company.

### WARING & GILLOW

Waring and Gillow purchased 150,000 ordinary shares of 10p each in Maple and Co. at 30p on March 18, 1979.

### Birmingham & District

Profits of Birmingham and District Investment Trust, a subsidiary of British Electric Traction Group, increased from £1.93m to £2.66m for 1979, after tax of £938,772 against £817,389.

Earnings per 10p share are shown as 7.6p (5.43p) and the dividend is lifted from 5p to 7p with a final payment of 5p.

After all dividend costs, the amount retained was £200,384 compared with £142,944.

Net asset value is given as 128.86p (114p).

Profits of Electrical and Industrial Investment Company, another subsidiary of BET, rose from £558,660 to £800,339 for 1979, after tax up from £212,546 to £252,038.

Earnings per £1 deferred ordinary share are shown as 791p (550p) and the dividend is increased to 685p (475p) with a final of 485p.

## Scottish Equitable Life Assurance Society

149th Annual General Meeting will be held on 20th March at 2.30 p.m. at the Head Office

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## Armstrong £4.3m midway but UK contributes little

that turnover has grown surprisingly well in the absence of the Autoparis network and second quarter profits have recovered quickly from the strike-affected July-September period, which probably made little or no

money. It would be wrong, perhaps, to annualise the results of the second quarter and project profits of some £16m in a year of industrial piece but as the OE contribution declines to, say, 20 per cent of total sales, the after market is expanding

steadily and Armstrong has yet to make much from its investment in the AAD fitting shops and distribution warehouses. The market is going for about 23.4m this time for a p/c and it is not clear how much is allowing themselves extremely fast and it seems a reasonable bet that further purchases, probably in the field of heavy batteries and heavy prework, will be on the way. The balance sheet is, after all, only 22 per cent geared and only of about 500,000 (the year) is provided simply. The shares added 3p to 50p yesterday and there should be scope in lift an insize yield of 7.5 per cent.

## Improvement

## to continue at F. Pratt

The current year at F. Pratt Engineering Corporation started with a good order book and with the precautionary measures taken to counter the worst effects of the steel strike, the first six months of 1979-80 should reflect the improvement seen in the second half of last year. Mr. A. M. G. Galliers-Pratt, chairman, told the annual meeting.

Océ is a trademark



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## Companies and Markets

## UK COMPANY NEWS

### Vosper cuts its dividend

PROFITS before tax of Vosper, shipbuilder, shiprepairer and engineer, were lower in the year to October 31, 1979, as expected, and the final dividend is being reduced.

The taxable surplus fell from £1.69m to £1.35m, on turnover down from £17.63m to £11.5m. The reduced final dividend of 2p (12.6912p) leaves the total at 4.6p, against 5.1912p.

The directors of the company, which is a subsidiary of David Brown Holdings, say that almost three years after nationalisation of the shipbuilding and shiprepairing side, the Government has still not paid fair compensation for the affected assets.

This has inevitably had an adverse impact on the results, they add. Apart from the absence of income from this source, redevelopment continues to be severely inhibited.

At midday, the pre-tax surplus was down from £18.60m to £17.95m. The directors expected that full-year profits would be somewhat lower than last time, and as a result they deferred any forecast of the final dividend.

Tax for the year took £13,030, against £9,493, giving a net surplus of £14,917, giving a dividend of 12.6912p (12.6912p).

A revaluation of investments resulted in a deficit of £47,154, compared with a profit of £77,145.

The run-down of the loss-making operations in the company's associate is now virtually complete, but has necessitated a further provision of £299,129 (£250,000). This left the available balance sharply lower at £357,019 (£1,050m).

Vosper Private, Singapore, made a satisfactory profit although somewhat less than the previous year, the directors say.

#### comment

The chorus of "why are we waiting" is rightly rolled out again at Vosper. Turnover sinks, while the government sits on what the company says is £25m worth of largely uncompensated nationalised assets. The rump of the business has had a tough time, with further and hopefully final provisions against loss-making David Brown-Vosper (Offshore). Investment and income interest is down from £688,000 to £530,000, since 1978 included retrospective interest on the £1.35m government payment on account. The government's marine acquisition is a foot back in UK waters, but unlikely to make significant returns until next year. Vosper is now quite tight for cash—the £5.5m deposits in last year's accounts were largely accounted for by progress payments which have since run down, while turnover and profits look to have bottomed out, this is still a waiting game. The 150p share price, down 13p, capitalises Vosper at just over £8m, round about net assets if the government paid its minimal £4.5m offer.

### Weeks Petroleum makes discovery in Louisiana

BY STEPHEN THOMPSON

WEEKS PETROLEUM, the Bermuda-based oil and gas exploration company in which National Carbonising has a 7.5 per cent stake, has made an encouraging oil discovery in southwestern Louisiana in the U.S. The well is in the North Cove Creek field and was drilled to a depth of 8,800 ft.

Four prospective producing zones were encountered, three oil and one gas. The well was completed in the lower sand and is flowing oil well. The other prospective producing sands will be tested in four future wells, the first of which is expected to commence in two weeks.

The discovery well is currently flowing at a rate of 100 barrels a day, the maximum allowed by government regulations for a well drilled to this depth, because of possible damage to the

reservoir from the entry of water. However, Mr. H. A. Nedom, chief executive of Weeks, said yesterday that the well has an estimated daily capacity of between 2,000 to 2,500 barrels. He added that the oil is high quality "sweet oil" of 45 degrees API. A quantity of oil had already been sold at U.S.\$40 a barrel.

Following the success of the discovery well Weeks has been purchasing cases in acreage adjacent to the field. Weeks is the major participant, with 30 per cent, of a consortium of companies involved in the project. Other participants include Mara Minerals, Ogle Petroleum, Yankee Petroleum and Petroleum Engineers. News of the discovery encouraged a 15p rise in Weeks Petroleum's shares to 335p yesterday.

### Bejam jumps 50% midway and expects further rise

TAXABLE PROFITS of Bejam Group jumped by 50 per cent in the first half to December 31, 1979, rising from £2.74m to £4.1m on turnover of £79.93m against £58.25m.

Directors are confident that profits in the second half will exceed those of the same period last year, when the surplus was £3.31m. The percentage increase is not expected to be as great as in the first half, however, when turnover benefited from severe weather conditions and industrial disputes.

An interim dividend of 1p compares with an equivalent 0.5775p—last year's total, adjusted for a one-for-three scrip issue, was 1.6275p. The board intends that the total for the current year should be more evenly divided between interim and final.

The dividend absorbs £724,000 (£417,000) and six months' tax takes £764,000 (£508,000). Stated earnings per 10p share are, up from 3.05p to 4.62p.

The improvement in profits came almost entirely from the main business of frozen food and freezers. The restaurant division, which began trading in June, 1979, following the acquisition of 35 restaurants from EMI, made a small contribution to interest charges and overheads, say the directors.

Eight of the restaurants have so far been sold for a total of £1.35m less selling costs, and contracts have been exchanged for the sale of a further 12. Of the 13 restaurants to be retained, two will accommodate Trumps Hamburger Restaurants, and four will house the new Hungry Fishermen concept, which the directors say applies fast-food systems to the production of traditional fish and chips. In addition, four separately-acquired branches of Trumps are now operating, or being fitted out.

Referring to the purchase on March 3 of 16 Fine Fare Discount Freezer Food Centres for £2.9m, the directors say they expect significant benefits to accrue from the acquisition, which will enable central costs to be spread over a wide base.

Twelve of the stores are in towns where Bejam is not at present represented; the remaining four will continue to operate until their future is determined in conjunction with that of nearby Bejam branches.

The group's policy of closing smaller centres and replacing them with larger ones has been continued in the first half, and there are now 151 branches with a total selling area of 527,000 square feet.

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#### comment

In spite of the fact that last year's first half performance was disappointing, Bejam's latest results are impressive. While other food retailers have in complete vigour, Bejam appears to have secured for itself a profitable niche in the deep freeze market. The food centres, the cornerstone of the business, did particularly well with a volume gain of around 50 per cent. Sales of freezers (less than a tenth of group sales) were steady at roughly 43,000 units. Clearly, though, it would be unreasonable to expect the company to maintain this rate of growth, if only because the weather this winter has not been particularly severe and industrial disputes not as frequent as last year. In addition, the cash position will not look as healthy due to the £2.9m lay for Fine Fare's freezer operation and the capital expenditure incurred on converting many of the restaurants—some of which have been sold—bought from EMI. Nevertheless, profits of at least £7.6m look likely for the year, an increase of more than a quarter. At 61p, up 4p, this puts the shares on a prospective fully-taxed p/e of 12 while the yield is 2.2 per cent assuming a 1.2p final.

### Receivership for two companies

Adverse trade conditions and contract losses have forced the directors of H. J. Manders the Cheddar building contractor, to put the company into receivership.

For the time being the company, which employs some 70

people, continues to trade while the Receiver, Mr. Ian Melson, of Truett Ross and Co., conducts a review of its business.

A Receiver has also been appointed at Darlington based W. Richardson and Co., a heating, ventilating and general engineering company employing 170 people. He is Mr. E. Marquis of Peel Marwick Mitchell and Co.

### H. Mackay falls in second half

IN A very different year, Hugh Mackay and Co. reports a drop in 1979 profits from £650,083 to £534,669. The company makes Durham carpets, and the expected and normal UK retail sales volume during the autumn never materialised. Turnover for the year was £9.95m (£8.67m).

For the first six months, profit had risen from £218,000 to £374,000. After a lower tax charge, however, net earnings per share are up from 7.86p to 8.54p, and the dividend is held at 3.62p net with a final of 2.22p.

### Hampson ahead at six months

PRE-TAX PROFIT at Hampson Industries, the engineering and industrial cleaning group, advanced from £274,180 to £321,410 in the six months to September 30, 1979. Turnover rose from £6.74m to £7.94m. The tax charge was £167,133 compared with £142,574. The interim dividend is effectively increased to 0.275p (0.25p). Last year's equivalent total of 0.727p was paid from profits of £534,118 (£514,194).

### Banro ahead despite problems

DESPITE INDUSTRIAL difficulties brought about through the road haulage dispute and engineering workers' strike, pre-tax profits of Banro Consolidated Industries improved from £1.07m to £1.18m in the year to December 31, 1979. Second-half profits showed a modest increase from £575,000 to £604,000.

The final net dividend is 2.425p, making a total of 3p. This is a 36.5 per cent increase on last year's adjusted 2.197p.

The full year's sales of the group, whose main activities are the manufacture of framed windows, rolled sections, pressings, car body components, and

decorative trim for domestic appliance and motor industries, increased from £14,76m to £15.78m. Tax was substantially lower at £221,360 against £331,131, and dividends absorbed £160,737 (£117,659).

Mr. Edward Rose, the chairman, says in his report that the finances of the group are sound. He confirms that the acquisition of Etablissements Farrier and Penin in France will add to the growth and profitability of the group generally.

He adds: "With this first major foothold in Europe, we expect expansion of product lines, and the group's existing

UK and potential customers will benefit from the increased range of products which will be available. The group will continue to pursue its policy in looking for suitable acquisitions."

He says the current financial period has started well with profits to date ahead of the corresponding period last year. The enlargement of the group should enable it to take full advantage of potential growth in the future and there is every confidence that business will be expanded.

Stated earnings per 20p share are up from 9.9p to 17.2p.

Raleigh Silencers Creda Archer British Aluminium Matrix  
 Reynolds Parkray Metsec Glow-Worm Chesterfield  
 Russell Hobbs Tubes Round Oak Drynams Cox Desford  
 Sunhouse Crane Packing Crypton & Pollock New World Fords



## TI strength in domestic appliances

### Growth record marred by engineering strike

### Industry needs support for exports

TI Chairman, Sir Brian Kellett, in a press interview yesterday warned that some parts of manufacturing industry were in a battle for survival against high interest rates and strong sterling. Manufacturing industry accounts for two-thirds of the country's exports of goods and services. It is therefore vital to our future that it should survive in sufficient health to play its part in national recovery in due course. Government could help, at least with a lifeline of reduced interest rates for manufactured exports.

**Results**  
External sales increased by 10% to £1213.8m but trading profit declined from £89.7m to £73.5m. Interest charges in total increased from £15.1m to £23.1m largely as a result of higher interest rates.  
Profit before tax at £52.2m was £37.8m lower than in 1978. The tax charge was £12.3m compared with £17.3m and earnings for the year before extraordinary items were £31.6m compared with £49.8m.  
1979 was a year of disappointment,

Consolidated profit and loss account year ended 31st December 1979			
	1979 £m	1978 £m	
External sales	1,213.8	1,106.0	
Trading profit	73.5	89.7	
Proportion of profits of associated companies	1.8	5.4	
Interest on overdrafts and other short term borrowings, net	13.5	7.3	
Profit before loan interest payable	61.8	87.8	
Loan interest payable	9.8	7.8	
Profit before taxation	52.2	80.0	
Taxation	15.3	17.3	
Proportion of profit after taxation attributable to minority shareholders	8.3	12.9	
Earnings for the year	31.6	49.8	
Extraordinary items	(1.9)	(11.0)	
Profit after extraordinary items	29.7	38.8	
Dividends	15.1	18.8	
Amount added to retained earnings	14.6	20.0	
Earnings per £1 ordinary stock	53.3p	84.5p	

marrying the record of increased profits year by year over a long period. The results were dominated by a number of major external factors, principal among which was the engineering strike which began in August and ended in October, causing a loss of pre-tax profit approaching £20m. The results also reflect high interest rates, resurgent inflation and an appreciation of sterling which has had a material impact on export margins.

**Dividends**  
The Board recommends a final dividend of 13p per £1 Ordinary Stock payable 13th May 1980 to Ordinary Stock holders registered on the books of the company at the close of business on 15th April 1980.

This dividend brings the total dividend for the year to 25.5p compared with 23.39p last year.

**Balance Sheet and Cash Flow**  
There was a net cash outflow for the year of £13.8m. This increase in net borrowing results in an increase in the percentage of net borrowing to shareholders' funds from 27.6% in 1978 to 30.0% at 31st December 1979. Capital expenditure totalled £48m,

Results by Business Area					
	External sales		Profit before loan interest payable		
	1979 £m	1978 £m	1979 £m	1978 £m	
Steel tube and steel	314.1	318.9	11.8	21.6	
Aluminium	288.4	228.3	22.6	27.4	
Specialised engineering products	243.2	223.3	11.7	17.1	
Domestic appliances	208.4	175.7	15.3	9.0	
Cycles and toys	157.1	158.3	(3.6)	8.0	
Parent and other companies	2.5	1.5	4.0	4.7	
	1,213.8	1,106.0	61.8	87.8	

The Annual Report will be posted to Shareholders on April 17, 1980. Further copies will be available from The Secretary, Tube Investments Limited, TI House, Five Ways, Birmingham B16 8SQ.

**TI Group**

reflecting a continuing policy of investing in modernisation and cost saving schemes in order to improve competitiveness.

**Analysis of results by business area**  
Aluminium and Domestic Appliances gained significant volume growth and have rewarded the large investments in recent years to expand and modernise processes and products to best international standards. The improvement in Domestic Appliances came particularly from improved market share and good product impact. Specialised Engineering also had growth areas, including Silencers and Seals, although there was weakness in the Industrial Electrical business, which has now been sold to our partners GE of America. Steel Tube, Steel and Cycles suffered substantial loss of volume from the engineering strike.

Exports from the UK increased by 5% to £240m which, after allowing for inflation, represents a real-term decline. A reduction in exports to Africa, principally lower sales of cycles to Nigeria, accounts for a significant part of this, but on a broad front, the strength of sterling was a severe handicap to our export efforts.

Consolidated balance sheet 31st December 1979			
	1979 £m	1978 £m	
Net assets employed	227.4	213.7	
Fixed assets	2.9	1.4	
Deferred revenue expenditure, net	34.1	36.1	
Investments	589.9	558.5	
Current assets	554.4	507.7	
Deduct: current liabilities	299.9	261.5	
	554.4	547.2	
Financed by			
Issued capital	59.3	58.7	
Reserves	308.4	291.5	
TI stockholders' funds	367.7	350.2	
Interests of minority shareholders	59.6	64.3	
Total shareholders' funds	427.3	414.5	
Loans	100.5	100.4	
Deferred liabilities and credits	26.6	32.3	
	554.4	547.2	

## FAIRCLOUGH

### Fairclough Construction Group Ltd

Group Results - Year Ended 31st December, 1979		
	1979 £'000	1978 £'000
Turnover	237,472	232,909
Profit before taxation	10,166	9,555
Profit after taxation	7,036	4,869
Earnings per Ordinary Share	16.03p	11.09p
Dividend per Ordinary Share	4.00p	3.50p

Points from the Statement of the Chairman, Mr. Oswald Davies, C.B.E., D.C.M.

- \* The Group's profits have been increased in a difficult year for the industry.
- \* Slight decline in U.K. profits offset by increased overseas contributions.
- \* We have entered 1980 with the biggest and best workload in the Group's history.
- \* The Group is stronger and better balanced than ever before with sound management at all levels.

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STEELWORK-MATERIAL HANDLING-MECHANICAL ENGINEERING

## Adams & Gibbon Ltd.

### Extracts from the Chairman's Address

The group net profit before taxation earned in the year ended 30th November 1979 amounted to £782,000 compared with £558,000 in 1978, representing an increase of 40%.

The most difficult obstacle currently affecting our particular sector of the motor industry is the extremely high cost of finance and the present interest rates in excess of 17% make it extremely difficult to operate our capital intensive

vehicle sales activities at a satisfactory level of profitability.

Our group's prospects for 1980 must therefore be assessed in the light of these very high interest rates, and although we shall enjoy the advantage of much improved availability of product from Vauxhall Motors boosted by the introduction of a major new model from this manufacturer, the year ahead looks certain to be a difficult period in which to achieve any material advance in profitability.

Vauxhall/Bedford, Opel, Datsun, Citroen, Toyota Dealers

**A&G**















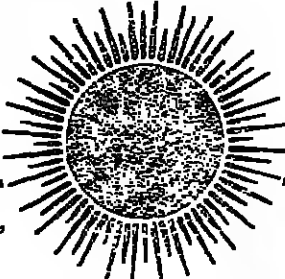
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# The case for an inheritance tax

BY CEDRIC SANDFORD

## TAXES ON CAPITAL TRANSFERS AT DEATH IN MAIN EEC COUNTRIES

Country	Form of tax	Exemption including any nil rate band (£)	Starting rate of tax (%)		Minimum taxable wealth which may attract maximum marginal rate (£)	Maximum marginal rate of tax (%)	
			Child	Stranger		Child	Stranger
Belgium	Inh	7,300 Nil	3	20	145,700	145,700	17
Denmark	Inh	600 4	2	15	78,100	78,100	32
France	Inh	18,100 1,400	5	60	10,400	2	20
Germany	Inh	21,800 728	3*	20*	24,271,800	24,271,800	35*
Ireland	Inh	137,600 9,200	25	20	229,400	80,700	50
Italy	E	15,800 15,800	3	3	326,300	526,300	31
	Inh	500	—	3	—	126,300	—
Holland	Inh	1,300 300	3	27	110,400	110,400	17
UK	E	25,000 25,000	10	10	1,985,000	1,985,000	75

Rates of tax as at June 1979. Rates of exchange for conversion of national currencies to sterling as at March 14, 1979. \* Slab scales. 1 Wholly exempt. 4 Flat rate. E=Estate. Inh=inheritance. Source: The Taxation of Net Wealth, Capital Transfers and Capital Gains of Individuals, OECD 1979.

IN THE coming Budget the Chancellor is expected to make changes in capital transfer tax following the review announced in his Budget Speech in June 1979. The biggest change of principle would be a switch from the present donor (or estate) base to a donee-based inheritance-type tax. What is the case for such a change and are the Conservatives likely to make it?

The main argument of a long line of advocates of a donee-based transfer tax—of whom the Meade Committee was the latest—has been that it is a more effective instrument to reduce inequality in the distribution of wealth.

The difference between the two forms of tax can be illustrated by reference to transfers at death (as distinct from gifts inter vivos). With a donor-based tax (apart from any special concessions to a spouse or children) tax liability is determined by the size of the estate irrespective of its distribution; thus a millionaire's estate bears the same tax whether the millions are left to one person or divided among 1,000 inheritors. With a donee-based tax, however, tax is levied on what is received irrespective of the size of estate from which it came, so that the more widely an estate is dispersed the less the total tax paid on it.

Thus an inheritance tax may promote a more even distribution of wealth in two ways. First, it offers a tax saving incentive to the wealthy to disperse their fortunes. Second, it strikes directly at the continuation of inequality between generations, for it is the receipt of large inheritances, not the leaving of large estates as such, that perpetuates inequality.

The strength of the tax incentive to disperse property is unknown. It can be argued that most people want to leave their wealth to their immediate family and will do so anyway, irrespective of the form of death duty. But some wealthy persons may be induced by tax-saving considerations to leave more property than they otherwise would outside the immediate family circle; and some of the not inconsiderable numbers of the rich who die childless may well choose to leave their property in a way which allows them, rather than the Chancellor, to determine the disposition of a larger share of it. The more important effect, however, is the second, the tax on large inheritances.

If the same scale of rates were applied with an inheritance tax as with an estate-type tax the total revenue to the Exchequer would be lower because only when an estate was left in one person would the yield be the same; in all other cases it would

be less. Thus, for an equal yield to the Exchequer an inheritance tax would need to have a higher scale of rates. Estates which were widely dispersed would then pay less tax than with an estate tax but those left to one or a small number of persons would pay more. Thus a switch from a donee-based to an equal revenue donee-based tax would change the incidence of death duty so as to promote equality.

If gifts inter vivos are brought into the picture, the donee-based tax which precisely corresponds to capital transfer tax would charge the recipient of each gift or legacy at a rate determined by the total amount previously received by way of gift or inheritance. Such a tax is often called an accessions tax.

These arguments, you may say, are all very well, but the present Government is hardly renowned for egalitarian views. Indeed, Lord Copefield, the man entrusted with the capital tax review, has made clear his antipathy to the use of the tax system for egalitarian purposes. Why then have the Conservatives been expected to look sympathetically on a switch to an inheritance-type tax?

The first point to make is that a death duty necessarily affects the distribution of wealth. At the rates of transfer tax levied in modern states those who have accumulated property are unlikely to save against the full tax liability on their deaths; similarly, few inheritors will save to make good the effect of tax in reducing their legacies. Thus death duty, in today's world is concerned with the transfer of assets. An estate-type tax, like CTT, reduces inequality in the distribution of wealth in one way only, by transferring property from the rich to the Revenue; a transfer from

the private sector to the public sector of the economy.

An inheritance-type tax reduces inequality partly in this way, but also by encouraging a wider dispersion of property within the private sector. Advocates of state socialism should logically go for the estate-type tax; Conservatives, as advocates of a larger free enterprise sector, should go for the inheritance-type—especially if they genuinely seek to create a property-owning democracy.

## Rewards

In other respects the economic philosophy of the Conservative Party ought not to be averse to death taxation of the appropriate kind. The ethic of capitalism surely is that rewards should be related to output contributions; thus a Freddie Laker deserves large profits because of his signal service to mankind by making air travel cheap. But what service has an inheritor rendered? Some caution may be necessary in preventing taxation at death reducing the incentive of those who accumulate property. That apart, the capitalist ethic would seem to favour the heavy taxation of receipts that bear no relation to output.

The logic of this argument is a tax on the recipient of inheritances. In any case general equity arguments favour relating tax to what is received rather than to the size of the estate, which bears no necessary relationship to the benefit of the inheritor. Moreover, to relate tax to the circumstances of the heir offers the most scope for modifying the tax burden in ways which accord with prevailing conceptions of equity. Thus it may be thought appropriate to allow a special

exemption to the minor child of a deceased parent (as for example, in Sweden).

In fact, the equity argument has led many illustrious Conservatives to espouse an inheritance tax in preference to the estate-type. When Sir William Harcourt first introduced the estate duty in 1894 debate in the House of Commons centred on two major principles—progression, or graduation as it was then called (for the estate duty was the first consistently progressive tax in the UK tax structure) and the appropriate base. The Conservative Opposition, particularly in the persons of Balfour and Goschen, preferred the donee-based inheritance tax.

"You have adopted graduation," thundered Balfour, "because you think it is the method to produce equality of sacrifice. Why have you not the sense or the courage to make your system consistent? I understand the advantage of taxing a man at an increased rate according to his wealth; I do not understand the advantage of taxing a man exceptionally, nor according to his own wealth, but according to his father's wealth, and that is what you do under this Bill. . . . In Heaven's name apply graduation like rational beings and graduate property in proportion to the amount enjoyed and not in proportion to the amount left by those who can no longer enjoy it." (Hansard, May 10, 1894.)

The Conservative case for an inheritance tax was given added point by the proposals of Lord Randolph Churchill. In 1906 Winston Churchill (as he then was) in his biography of his father, revealed that in his abortive Budget of 1886 Lord Randolph had planned to replace the death-duty of

existing duties at death by a single comprehensive inheritance tax.

Winston Churchill proceeded to sum up his own view of the inequity and folly of donor-based taxes thus: "We now assert the vicious principle of taxing property instead of persons. We try to tax the dead, instead of the living. The state refuses to consider, for purposes of graduation, anything so personal as the sacrifice of heirs and bases itself on the mass of the inheritance."

To this body of illustrious Conservatives must be added a more recent Chancellor, Mr. Anthony (now Lord) Barber. His inclination towards an inheritance tax was seen by the publication of the Green Paper, Taxation of Capital at Death: A Possible Inheritance Tax in Place of Estate Duty, Cmd 4930, March 1972.

Clearly, if Sir Geoffrey Howe were to indicate his sympathy for a donee-based transfer tax he would be following in distinguished footsteps and upholding the reputation of the Conservatives as the party of tradition.

There are also other, if less strong, arguments which may appeal to some Conservatives. A switch to an inheritance tax might encourage small companies. As the Bolton Committee indicated: "It is at least possible that the adoption of a system of legacy duties would benefit the small firms sector by causing capital to be more widely dispersed in smaller units and thus giving more people the means of starting their own business." Another argument (which tends to run counter to the "equality" argument) is that a donee-based tax enables different tax scales to be applied to different degrees of relationship.

Such differentiation according to consanguinity is the typical pattern for inheritance taxes elsewhere, with the lowest rates applying to the closest relatives. Conservatives keen to promote the cohesion of the family unit might find this possibility attractive. Finally, there is a less worthy motive. If the Conservatives wished to reduce the weight of death duties without appearing to do so they could switch to an accessions tax while retaining the CTT rate scale.

Britain is the only country in the EEC which does not have a donee-based transfer tax. All other EEC countries have inheritance taxes with Italy having both an inheritance tax and an estate duty. Ireland is a particularly interesting case; the Republic of Ireland inherited an estate duty but in 1975 abolished it in favour of a

donee-based transfer tax. The Irish capital acquisitions tax provides for cumulation of gifts and inheritances in determining the rate of tax, but receipts are cumulated from individual donors only, unlike the accessions tax where gifts and legacies are cumulated irrespective of source.

With the Tories do anything? Since a new tax would involve additional staff and an accessions tax would in any case tend to be somewhat more expensive to administer than CTT, there is little prospect of the Conservatives committing themselves to an inheritance-type tax in the near future when they are desperately seeking to cut the Civil Service. In the longer term an inheritance tax must be regarded as a possibility.

## Backpedalled

Mrs. Thatcher went on record in January, 1975, with a commitment to abolish CTT without specifying what should take its place. Since then Conservative spokesmen have backpedalled somewhat and spoken of "drawing the teeth" of CTT while taking an unhurried look at future possibilities for reform. The Conservative 1979 Manifesto promised to "deal with the most damaging features of CTT . . . and propose a simpler and less oppressive system of capital taxation in the longer term."

The longer term could include a switch to a donee-based tax. A start could be made in this Budget by the promise of a Green Paper and perhaps a select committee. When CTT was introduced, there was no Green Paper, no select committee and very little opportunity for public discussion. It is true that we had a Green Paper on the subject in 1972, but that was in many ways unsatisfactory; it made no mention at all of taxing gifts inter vivos except in the years immediately before death; the Green Paper came after a spate of reforms—unified income tax, corporation tax reform and VAT, to all of which the Government was committed, and these more immediate prospects monopolised public attention; and no select committee was set up to take and sift evidence on the subject.

The review of capital taxation of the past year has been marked by secretiveness rather than openness. The Tories would do well to promote a public debate on the full implications of a switch in a donee-based tax.

The author is Professor of Political Economy and director of the Centre for Fiscal Studies at the University of Bath.

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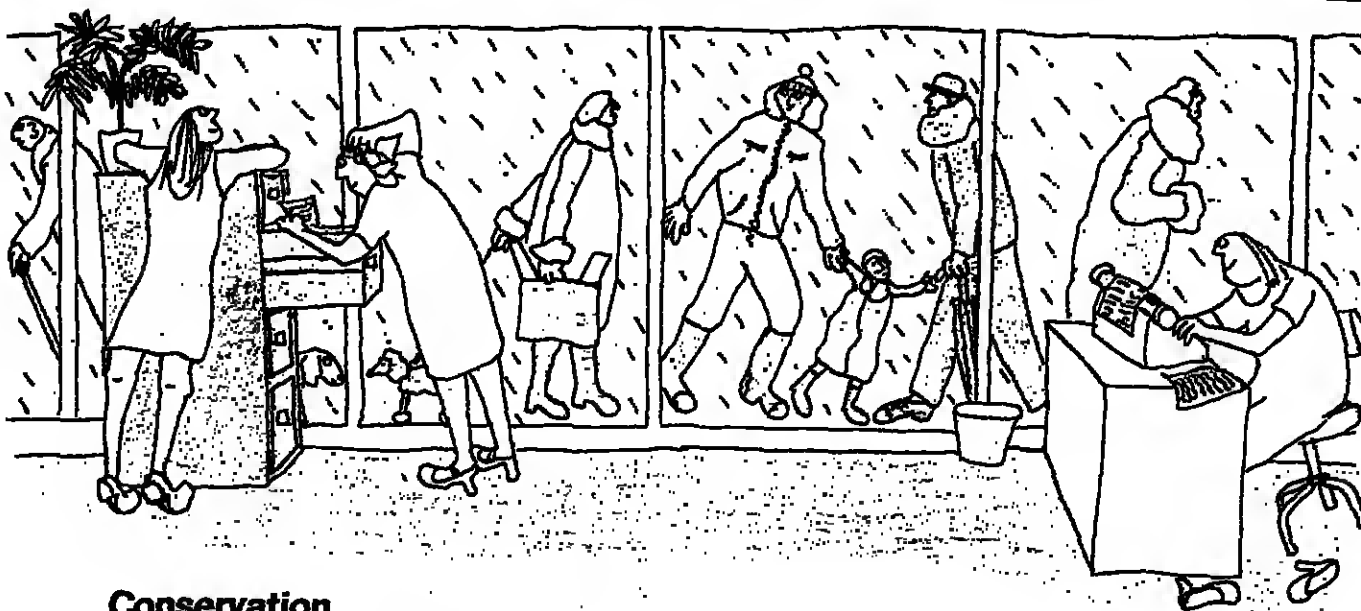
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## FINANCIAL TIMES SURVEY

Thursday March 20 1980

## Building and Energy Saving

Buildings of all kinds are among the biggest consumers of energy—and thus of potential savings. The need to develop a long-term strategy to this end is widely recognised, a consensus which should smooth the task of the many disciplines involved in the building design team.

## New skills to be acquired

By Colin Amery, Architecture Correspondent

IT IS only in the past few years that energy conservation in architecture has become a leading national issue, but there can be no doubt that buildings are the key to energy conservation. They use over half the nation's energy and, given the resolution, it would not be difficult to achieve savings that could amount to over 50 per cent.

Many of the energy savings that could be made in buildings—and the way we use them could be lasting ones—a less prodigal use of energy has to become part of the national way of life. A reduction in the amount of fuel used in our building stock would not constrain economic growth; rather would it lead to a barbouring of essential supplies.

Energy saving in buildings must not be considered as just another fad. It should lead the professions responsible for the creation of the built environment to acquire the new skills needed for energy conscious design. Energy conservation should be as much part of the practical skills of those who build as an awareness of the basics of structural mechanics.

For the purpose of this survey it would be useful to see exactly where we are in terms of the development of a national policy in relation to buildings and energy. The Government does not appear to have an energy policy as such. Instead

of a concrete policy the Department of Energy has a seven-point plan as follows:

- 1 Flexibility—keeping options open.
- 2 Pricing—to reflect the full energy supply costs.
- 3 Diversity—maintaining a mixed fuel economy to spread risks.
- 4 Research—an awareness of the value of constant research and demonstration.
- 5 Reconciling the fuel industry developments with questions of environmental impact.
- 6 Conservation.
- 7 International co-operation.

## Unconvincing

This broad energy strategy is the background to any discussion or decision-making on the role of energy saving within the building industry. Although the Government claims to have a strategy rather than a policy, this is rather an unconvincing distinction. For example, it is pretty clear that the Government plans to switch away from oil and develop both coal and nuclear energy. Against this background the Department of the Environment has issued several instructions and guide-

lines that will have a direct effect on the way buildings are built.

The building regulations system is still under general review but it is clear that new thermal regulations and energy targets will provide a new basis for low energy construction in the eighties. The Department of the Environment's programme for designing better insulated homes gives an indication of the way the Government is thinking.

The guidelines are quite precise, ranging from advice about where to put the fridge and the control of heat transfer through the house—which really means that it is wise to put curtains on the stairs to contain heat. These domestic guidelines follow principles that apply to any energy users including commercial and industrial.

The principles include a belief that heating systems can be made smaller and cheaper, and that as space heating load is reduced the control of ventilation becomes crucial. The control of draughts must be allied to the incidentals, use to be made of heat gains—for example solar gains.

A recent study carried out for the City of Liverpool asked the question: what are the priorities that the city should have for its building stock? The

study showed that most of the building stock directly controlled by the city is schools and that most of these are brick buildings with pitched roofs. These buildings can be improved in terms of energy saving to pay back on the cost of the improvements in less than two years. The payback on the cost of altering more recently designed school buildings, which are likely to be lightweight structures with too many windows, is up to ten years.

## Occupancy

Many of the critical factors relating to energy use are the hours of occupancy and the heated volume. The Liverpool survey showed that local authorities need to concentrate on energy management. A great many buildings are under occupied and under used for the amount of energy they consume. More advice is needed on how to use buildings economically.

In the industrial field there is a considerable awareness of the need for energy conservation but there is often little co-ordination between the building and the industrial process. Factories are often extracting heat during the manufacturing process while running a space heating plant at the same time. Too often in factories heating

is thought of in terms of overall temperatures and the changes of air—this can be an expensive process as factories frequently have a low density of occupation. More selective heating and ventilation supplies should be examined in relation to the workplace.

On a larger scale the combination of heat and power processes could lead to considerable changes in the design of our cities. The district heating process that makes use of the waste heat from power stations works more effectively if the urban layout is a high density one. In housing areas this means a density of about 50 homes to the hectare, which by present standards is probably too high.

Combined heat and power systems are at present only cost-effective in city centres. The amount of capital investment needed to organise an effective extension of this system at a national level would be colossal.

Some more extreme views do prevail in the area of town design and energy consciousness. The Political Ecology Research Group suggest that the future lies in rural resettlement. Energy would be saved by mass production of organic food requiring dispersed groups of houses along garden city lines all over the country!

Anyone seeking advice on how

to make the best use of their buildings is likely to be inundated by the plethora of advice and equipment that is available. One area that perhaps needs more attention is the field of fuel control. One British company, Chubb, takes the view that the most effective contribution to energy saving is to maximise the heat energy released from the fuel that is already in use. Proper maintenance of boilers and the addition of chemical fuel controllers can guarantee the saving of up to 7 per cent on fuel bills. The use of chemical compounds, like Economix makes it possible to clean boiler plant while it is still in use, thus eliminating waste. The improvement of combustion efficiency is an important adjunct to the proper design of energy conscious buildings.

Many aspects of the building regulations here in the UK do not appear to encourage design innovation. There is still a tendency for the rules to rely on the specification of the thermal properties of building components, which can hinder the development of such fields as passive solar energy. There is a need for the regulations to see buildings as part of an energy system based on a building's energy performance. The approach, which is already in use in the U.S., gives much more opportunity to architects and designers to demonstrate their innovative design skills.

Leeds Infirmary has installed its non generating station complex—the whole designed by Building Design Partnership—to supply the energy needs of the new hospital and the medical and dental schools. It has already proved its worth, with a fuel efficiency rating higher than predicted.

Life time

Buildings are by their very nature a long-term proposition and the reorganisation of the existing and new building stock to take into account the energy saving needs of the nation is correspondingly a long-term process. Buildings last for a long time—over 10 per cent of the housing stock of the UK was built more than a century ago. Heating and energy producing systems need to be replaced in

into the store, or to the exterior. But both these methods are wasteful and haphazard.

Now, this valuable waste heat can be brought under control and used in one of two ways. Firstly it can be used to preheat cold water for washing purposes. A boiler or immersion heater need then only be used to complete the heating, instead of having to start from cold. It is plant of this type, built and tested for M&S by Maryat Jackson Morris, that can achieve annual water heating savings of 76 per cent.

Cost recovery

With these savings recovery of installation costs should take three years for existing stores, or one year for new ones. Mainly applicable where there is a large demand for hot water for washing, the system has now been installed at ten M&S stores throughout the country.

The second way is to use the waste heat to warm incoming fresh air, thus reducing the amount of conventional air heating needed. If heat is not needed, the warm air is simply exhausted to outside. This method, suggested by Dalgety's consultants MEC Bird, Sons and Associates, and the Electricity Council, is now in use at several of the company's stores in the south of England. Preheated air is directed carefully into the shop to avoid making refrigerated cabinets work harder to keep cold, or it can be sent to another part of the shop altogether. This system can be used in smaller premises than the water heating scheme, provided that a ducted air supply and extract system is installed.

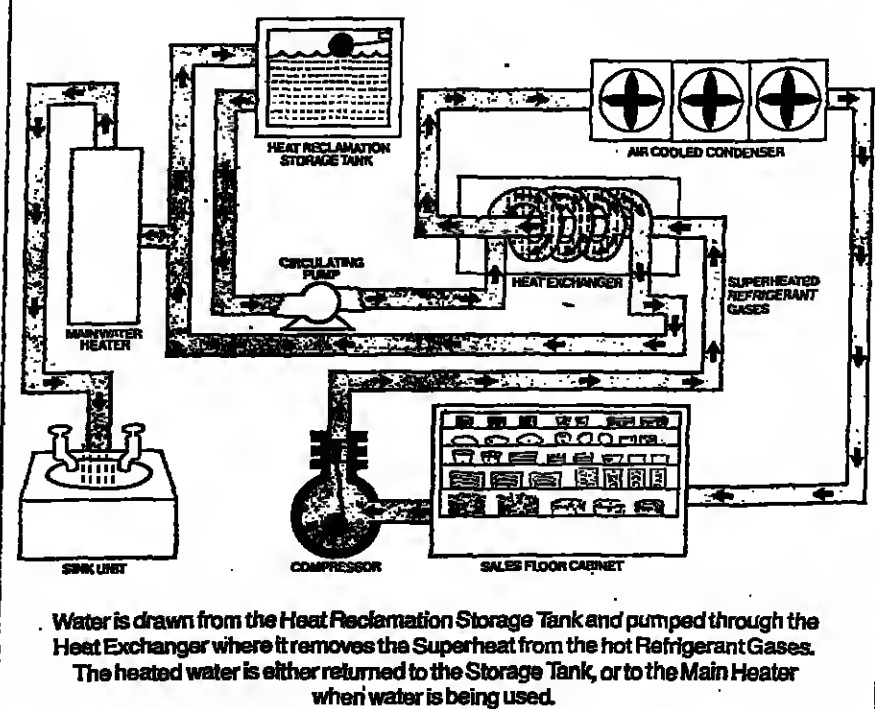
For more information on heat recovery systems tick box No.2.

## Waste heat from the freezer is a big cost saver

If your organisation is involved in retailing refrigerated or frozen foods, equipment now available can probably help you cut heating costs on an impressive scale.

Recent running tests on an installation designed to reclaim waste heat from chilled food displays at Marks & Spencer, Winchester, have revealed that 76 per cent savings in water heating costs can be made—from £1,700 to a mere £400 per annum.

Buildings are by their very nature a long-term proposition and the reorganisation of the existing and new building stock to take into account the energy saving needs of the nation is correspondingly a long-term process. Buildings last for a long time—over 10 per cent of the housing stock of the UK was built more than a century ago. Heating and energy producing systems need to be replaced in



Water is drawn from the Heat Reclamation Storage Tank and pumped through the Heat Exchanger where it removes the Superheat from the hot Refrigerant Gases. The heated water is either returned to the Storage Tank, or to the Main Heater when water is being used.

## Build Electric Bureau

Striking equipment displays at London's Build Electric Bureau, like the one pictured here, form a constant source of information for architects and builders alike. In fact, everyone concerned with services in buildings will find the bureau's displays an invaluable aid.

Space heating, water heating and lighting are all featured, together with a special section on heat pumps in commercial premises. Strong emphasis is placed in all the exhibits on the need for minimising energy consumption through properly designed installations.

Staff are always on hand with more information on queries arising from exhibits and related topics. The Build Electric Bureau is at the Building Centre, 26 Store Street, London WC1E 7BT. It is open from Monday to Friday 9.30 a.m. to 5.30 p.m. and Saturday 10.30 a.m. to 1 p.m.

For more information tick box No.3.



The Heat Pump Exhibit.

## Energy-saving pool lights are tops with swimmers

Simply by taking a critical look at the lighting of its swimming pool complex, a leisure centre in Leatherhead has cut its lighting load by 72 per cent. And into the bargain it has been attracting more users than ever since the old system was replaced.

The basis of this award-winning installation is an array of solarbeam floodlights using 250W SON-L high-pressure sodium lamps, whose warm golden light is ideal for swimming pool use. The three-pool complex had previously been lit by 34 wall-mounted floodlights using 1000W tungsten halogen lamps. When the centre's technical manager, Mr K. Price, decided to investigate ways of reducing the 34kW load, he approached Osram (GEC) for advice.

## Substantial savings

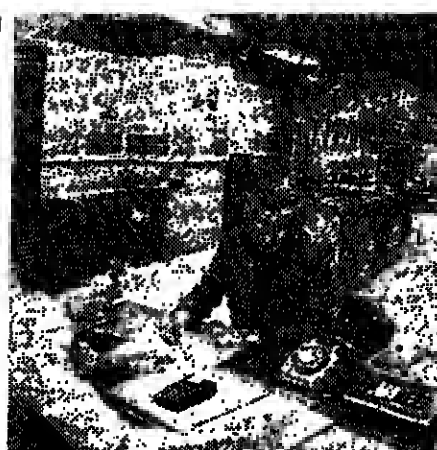
The scheme finally put forward slashed the lighting load from 34kW to 9.37kW at the same time substantially increasing the illumination level. This sort of saving, if

applied to all swimming pools in the country, would plainly be of great significance. And if the increased number of users is anything to go by, the more pleasant and welcoming environment produced by these lamps is a definite added attraction.

The system is wall-mounted and can be maintained and relamped with portable equipment, which means a minimum of inconvenience to staff and users alike. Conversion costs, including all labour and materials, came to less than £4,000. With the 25kW reduction in load and smaller maximum demand charges a payback period of under two years is predicted.

This scheme won the commercial section of EMILAS '78. The annual EMILAS competition aims to encourage energy-saving lighting installations.

For further information on the Energy Management in Lighting Award Scheme, 1979, write to Mr Karl Pike, Lighting Industry Federation Ltd, 25 Bedford Square, London WC1B 3HH.



Electric catering: refining the specifications.

## Monitoring scheme means better catering value

A continuous programme of equipment monitoring at the Electric Catering Centre, London, leads a drive to keep electric catering equipment as energy efficient as it can possibly be.

With a constant flow of new appliances becoming available, the Electricity Council's Project Planning Officer, David Taylor, sees the programme as essential. Not only does it provide valuable feedback to manufacturers, it also helps the centre's own project design teams give the best possible value for their customers' money. In the past, catering design has been a rule-of-thumb affair. If anything, installations have been over specified. So although they may have worked perfectly well, they have also been expensive in terms of both capital and running costs.

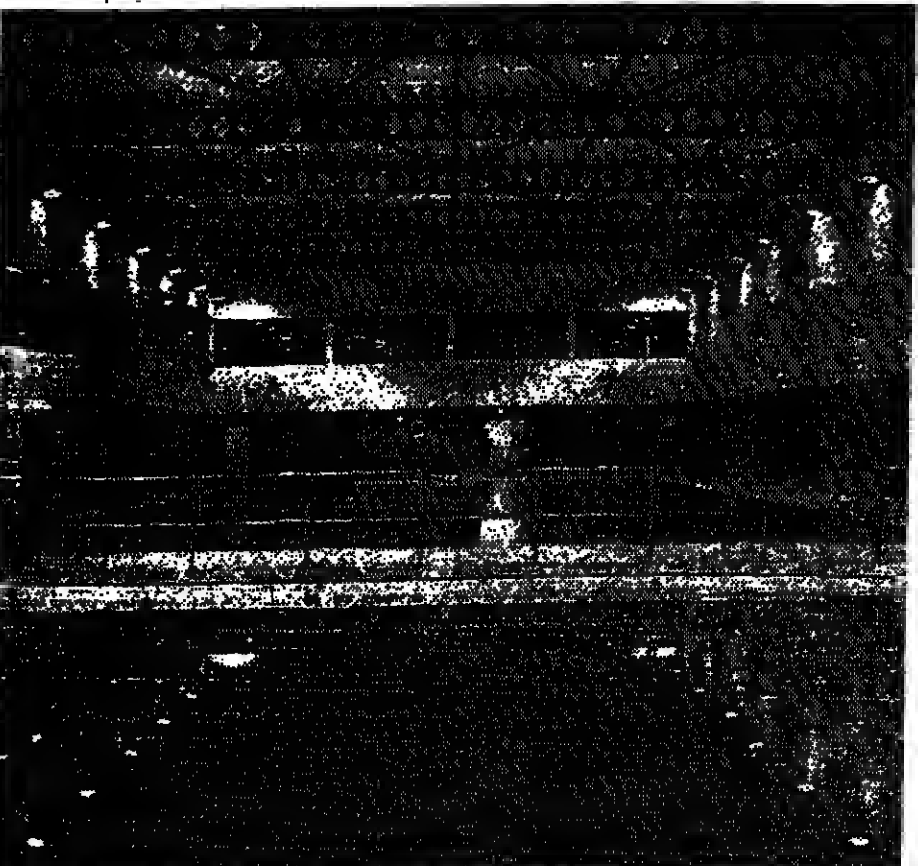
The Electric Catering Centre's design team today works to much closer specifications, aiming all the time at maximum cost effectiveness. They can give free detailed advice on catering installations of any size, from the smallest pub snack bar to large industrial installations. They will act as project planners, or simply in an advisory capacity. And with energy costs continually rising, this sort of service, based on soundly researched knowledge, will become increasingly important.

## Approved for safety

Where applicable, all equipment on display at the Centre carries the Electricity Council's Approved for Safety label, and much of the equipment can be used for demonstrations.

Another facility at the service of customers is a well-equipped conference area, with audio visual equipment, films and slide packs, and facilities for lectures and presentations. All this is available to customers who need information on any catering subject—free of charge—at the Electric Catering Centre 45 St. Martin's Lane, London WC2N 4EL.

For information tick box No.1.



Leatherhead's new pool lights: award-winning energy-saver

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The use of alternative sources of energy—notably the sun's heat—is being widely canvassed in the drive to cut down reliance on traditional fuels. Below Colin Amery discusses three such projects.

## Milton Keynes experiment

THE NEW city of Milton Keynes is remarkable for innovations of all kinds in its town planning and its architecture, and it has been bold in its experiments with various types of housing designs. It has, in many ways pioneered the application of solar energy systems to domestic use. This house, designed by Milton Keynes Development Corporation, has

been in use since 1975 and has provided several years of valuable monitored research. The house has a big solar panel in the sloping roof which supplies half the building's space and water-heating energy. During the first two years of test the system had a number of problems. The anodised collector surface gave low efficiency, the non-optimum

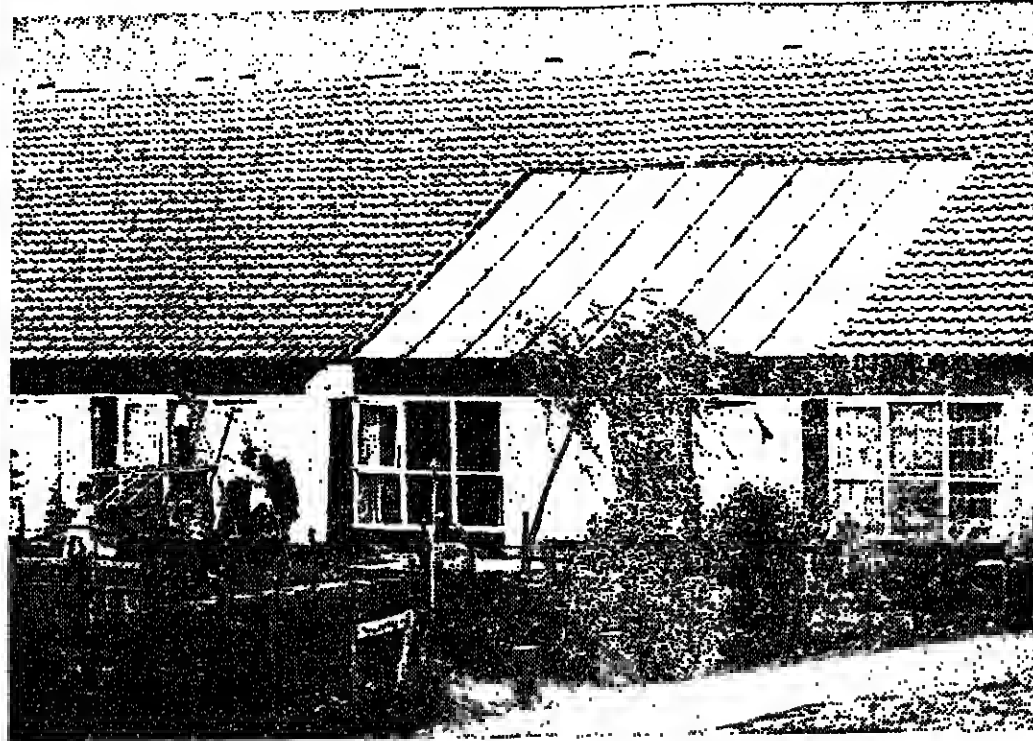
space heating control caused inefficient use of the low grade solar heat, and important control thermostats functioned badly and caused a waste of solar heat. Recent modifications have improved the performance. The collectors on the roof have been painted with "Nextel" paint which has increased their surface absorptivity—making

them about 20 per cent more effective. The unreliability of the thermostats exposed to high temperatures during the long summer periods has not yet been resolved. The use in future of solid state control devices is likely to help in this area. Over-night heat loss from the storage tank happens slowly but is being corrected by the installation of non-return valves in the collector inlet pipe.

The use of boiler (gas) heat and solar heat alternately has been proposed as a way to make more effective use of the solar heat. It does seem likely that the mixing of heating systems is in the long run the most economical.

The installation of solar heating in domestic settings is still beset with problems—not least the high cost of the initial installation. Patent glazing has to be installed on a south-facing roof with solar collector panels immediately below; insulation is then installed below the panels. A water glycol mixture is circulated through the panels and the energy collected is then stored in a thermal store.

It is probably too soon to decide on the true cost-effectiveness of solar energy in Britain's climate. It clearly makes sense in countries with more hours of sunshine than ours usually receives, but it is difficult for architects and designers to calculate the full long-term benefits to the domestic user. Heavy capital outlay is not yet producing matching savings in energy bills.



The Milton Keynes house with its solar panel in the roof

## School heating in Cornwall

THIS IS a single-storey school for 80 pupils on the north coast of Cornwall in an exposed location. It has acquired a certain fame because it was selected as an experimental solar energy research project by the Department of Education and Science. The object of the experiment was to explore the maximum use of solar energy, to see how it could best be used without compromising educational requirements.

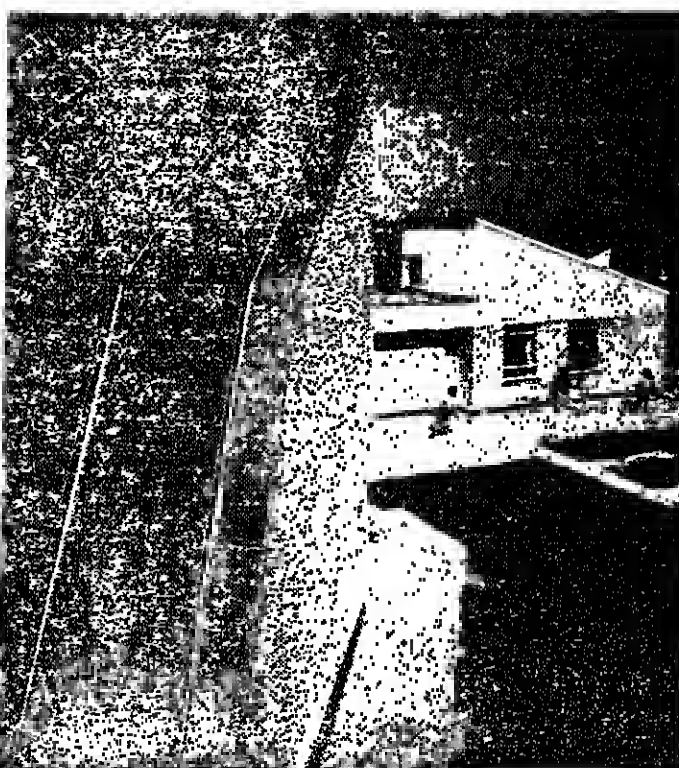
The solar panels and the equipment that goes with them is sited apart from the school buildings, which ensures that the layout of the school is not compromised. The system can then be changed or adjusted without any major inconvenience, and can also be examined as a separate package which in future can be applied to other buildings on other sites. Cost and planning considerations made it impracticable to locate enough panels to supply 100 per cent of the energy need.

The solar panels take up two rows, one at 35 degrees and the other at 65 degrees to the horizontal, to take the maximum advantage of both summer and winter sun. Between the panels the space is filled by the oil storage tank for back-

up heating and the two insulated water tanks. Whenever the sun is providing useful heat, water is circulated through the panels. Heat is transferred directly from the collectors through the storage tanks and into the heating system. In the school a low temperature warm air fan-assisted convector heating system is installed. Hot water for the kitchen and for washing is boosted by calorifiers. In the event of frost or of over-heating the water from the storage tanks is automatically recirculated.

The school buildings, which have an attractive domestic character, have very good daylight distribution. They are of traditional construction with a high level of thermal insulation, and have been carefully designed to take advantage of the winter sunshine and exclude the excessive heat of the summer sun. The windows all have curtains or blinds to conserve heat.

It is hoped that one day the spare capacity from the solar panel in the summer could be used to heat a swimming pool. The performance of the solar installation, which was designed by Cornwall County Architects, will be monitored for the next two years.



For Isaac primary school, showing (left) the separate building housing the solar heating installation



Interior of the CEEB South-West region headquarters office at Bristol

## CEGB scheme in the South-West

THE SOUTH-WEST region of the Central Electricity Generating Board is an area that runs from West London to Pembroke and Penzance. Within the region are 30 power stations with a transmission grid and 200 substations.

Architects Arup Associates were asked to design a new headquarters building for the region to provide 24,000 sq metres of space for offices, laboratories, workshops, telecommunications and computer facilities. The new building is situated some three miles from the centre of Bristol on Redcliffe Down and occupies a site of 15 acres on the crown of a ridge with outstanding views across open country.

Part of the extensive brief was to conserve energy—or in the more technical language of the brief itself, "to modulate the external climate through the structure and form and external enclosure of the building so as to ensure a good internal climate with the minimum use of purchased energy."

It is in winter that the fairly large heat input allows the building to operate efficiently. The heat from the warmed areas is removed by chilled water from central heat pumps and then redistributed. Any excess of heat is utilised to heat the water in the swimming pool and the supply of hot water for domestic use. During the winter the water in the pool acts as a reservoir for excess heat in the building, which is stored in the pool at night and recirculated around the building in the morning. In the summer the outside air is cool enough at night to be drawn through the hollow concrete floors to cool the floors, which in turn cool the daytime air in the offices.

From the outside the overhanging roofs and the careful planting ensure that the building will be kept shaded and cool. The energy performance of this building is kept under surveillance but there is no doubt that it is both an economical and agreeable solution to the problem of office design.

The architects investigated the possibilities of the use of solar and wind power but these were not found to be cost-

### Courtyards

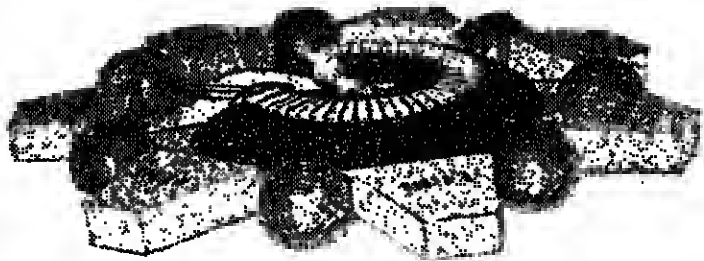
The design of the low-rise building is based on a series of work areas that are grouped around landscaped courtyards with service spaces between them. The design of the environmental services is based on the principles that the maximum use should be made of the natural sources of energy; that the maximum use should be made of the internal energy sources and that the control of the work environments should be responsive to individual users.

## Solarflame Nuclear Company Ltd.



We exhibited models at the energy show and discussed the proposed station with around four hundred top scientists and technicians from all over the globe. Export boards, companies and individuals have been expressing an increasing interest in the project.

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5000**

In 1980 we will commence with detailed computer design work and simulations, also we will be making an outline planning application for the Vistar 5000 power station. The second phase will require as much assistance as possible from the academic, computational and financial sectors. Drive, purpose and initiative has brought us this far on a very limited budget, perhaps there is a way in which you feel you may be able to contribute to the increasing momentum of our development.

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## The role of the architect

THE WORK of the Energy Group of the Royal Institute of British Architects to focus attention on the importance of buildings as conservers as well as consumers of energy has had a large measure of success. The whole subject of the use of energy in buildings has been well launched and is in the forefront of the minds of both those who commission buildings and those who design them.

What is the nature of the architect's job in relation to a rather uncertain energy "crisis"? Clearly the architect has two functions—one to try and assist with the reduction of wasteful uses of energy in existing buildings and the other to try to decrease the amount of energy actually to be used in the future. Architects have the edge over designers of, say, motor cars or industrial products as the building is something which can be reshaped quite easily over a period of time.

A house or a factory is a container for a whole range of activities and apparatus which change at a much faster rate than the building housing them. If the future is to be a low energy one there can be no question of the importance of the role that buildings will have to play. If architects fail to design resilient buildings that can accept quite fundamental changes in our way of life they will have failed as designers. Architects will argue, quite rightly, that if they are to design for this uncertain future, they need to have information that will help them foresee likely changes. To do this successfully the architect is only one of a whole team who should be working together to predict the future shape of our environment. In many ways the architect is the man with the general knowledge of buildings and he should be at the head of the interdisciplinary team that is looking at the social, political and administrative problems

that are all part of the energy "crisis" equation.

In the domestic field the architect has his work cut out to tackle design problems that will directly affect our day-to-day patterns of life as well as our daily consumption of energy. The architect will have to be aware of at least four types of domestic energy systems in the future design of houses. The heat pump, heat reclaim systems, underfloor systems and solar gain are all terms that the architect needs to be aware of and understand.

Houses of the future may well use a mixture of underfloor heating, heat reclaim and controlled ventilation, with heat pumps being used in a variety of ways. They are likely to be much better insulated and generally more airtight, with the accompanying problems of condensation and an understanding of how air moves through houses.

### Ventilation

Old houses have a wide range of ventilation systems, from the leaky sash window to under-floor airbricks. Architects must be concerned with the reduction of heat loss through the fabric of the building and the ventilation system. Only when this has been successfully controlled does it make any sense for controls to be placed on the use of fuel for lighting, cooking, and other household equipment.

Architects have for a long time been fascinated by the question of solar energy, even in a country like Britain where the amount of sun seems too little to justify any great effort to harness its energy. Recent researchers have dismissed the effectiveness of using solar panels for the heating of domestic water because they are uneconomical in the medium term. A total solar energy system for a house is as a substitute for all other sorts of systems likely to be more cost-effective. A 20-

metre square solar panel has been installed in a house monitored by the Building Research Station which needs a large storage capacity tank of water—so large in fact that it has to be sited in a separate building.

It is these technical problems that the architect has to try and solve as part of an interdisciplinary team.

What is a house likely to be like that is designed by an architect with energy saving as a first priority? Assuming that financial resources are modest the house is likely to be a timber frame construction roof with

infill walls. The roof and walls are likely to be insulated with a slab of proprietary insulating material. The construction is likely to incorporate some form of vapour barrier to mitigate heat loss radiation at night and solar gain during the day.

The timber construction will probably be supported on thick brick cross walls that provide a considerable heat store and prevent the kind of wild temperature fluctuations that can occur in lightweight forms of construction. The cavity walls will almost certainly be filled with an insulating foam, one of the most effective controllers of

CONTINUED ON NEXT PAGE

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## BUILDING AND ENERGY SAVING III

Need for reappraisal  
of energy flows

IT HAS been easy to take buildings for granted, to treat them as part of the background. Now with 55 per cent of the nation's primary energy used in buildings to provide a comfortable working environment, supply hot water and run small equipment such as TVs, washing machines and photocopyers, we have to recognise them as in the foreground. Only in special cases like some heavy industries is energy use in buildings relatively minor compared with that used for industrial processes.

Energy conservation is critically important nationally but for the individual business may be less so. Energy bills are commonly one to two per cent of turnover. Oil prices have clearly risen but gas prices have changed little in real terms for several years. Energy bills could be little bigger than before 1974.

But actual and expected fuel price increases and awareness of the potential for energy saving makes energy conservation worth taking seriously. Most existing buildings were not designed for energy conservation and are inefficient. Few companies can have fuel bills as small as the potential for savings of 25 or even 50 per cent can be ignored.

## Exploring

The polemical point here is that in exploring the potential for conservation a prime place must be given to the buildings themselves—not just their heating and ventilation plant but the fabric and its pattern of use. Some examples will indicate where the energy flows are and so suggest an approach to energy in buildings. These are of existing buildings—for two reasons.

First, if we wish to make significant energy savings by, say, the year 2000, existing buildings are the priority since most of the buildings for 2000 already exist. Secondly, we need a broad overview to integrate energy flows in buildings, processes and associated transport. This should occur during building design with a design team representing all interests. It is in the day-to-day running of existing buildings and in setting priorities for energy conserva-

tion that this balance tends to be lost and the role of buildings neglected.

In the sense that energy management involves taking a balanced view of all energy flows it hardly has a tradition. As an indication consider the number of existing companies and compare it with the number of advertisements for energy managers in the heavy industries. People of that status are needed to push through conservation investments. Their numbers are negligible.

Energy management has been the concern usually either of well qualified process engineers preoccupied with production, or of the generally less qualified heating and ventilating engineer—more prosaically, the caretaker. Their inclinations, skills and job specifications often mean that any consideration of energy conservation has largely ignored the building's fabric and patterns of use. The importance of these is most easily grasped by a familiar example, the home. We can then see how the principles can be applied elsewhere, though the differing priorities: the large industrial shed (factory or warehouse) provides an interesting contrast.

Buildings lose heat by conduction through their fabric and by excessive ventilation—warm air leaking through gaps in the building fabric and at windows and doors. At home we readily accept that these factors are important. Servicing the heating system, replacing it or switching fuels are not necessarily first priorities. We limit ventilation by draught excluders and cut the heat conduction rate by insulation. Draught equipment and left insulation plus heating controls can be relatively cheap and are often highly cost-effective.

It is a truism that we put scarce resources where they are most cost-effective. But even at home what to do first may not be immediately obvious. Energy conservation in identical houses has been found to vary by as much as 6:1. So we need some analysis of what energy is used and where to establish priorities for saving.

In the case of a deep shed, the wall area may be relatively small so we ignore it and plan to insulate the roof. But if excess

sive ventilation is found to be two or three times as great a source of heat loss as conduction through the building fabric, we should look at that first. Leaving industrial doors permanently open often accounts for most of this heat loss, so the most cost-effective measures could be to seal some doors and hang plastic strip curtains over others. Experienced people would suspect this hint could rarely be sure on cursory inspection.

There is no substitute for an energy audit, an account which must include the role of buildings. With a fuel savings potential from insulation and ventilation control of maybe 25-50 per cent with less than five years' payback an audit is surely an investment.

## Controlled

The controlled output of a heating system has to match the building fabric, its pattern of use and our ability to control it. If your house is empty all day, for example, you need to be able to warm it up quickly in the evening. Ideally this means combining fast responding heaters with a building fabric that reflects heat, so warming the air rather than soaking it up. Matching of building fabric to heating plant applies to all buildings.

The system must also respond to adventitious gains, to maintain comfort economically at home using heat from machines like TVs and cookers, from lights, sunshine and people. In the factory the main source may be waste process heat. Too often it is not reclaimed but exhausted up the chimney while a separate boiler is generating heat for comfort. Apart from re-emphasising the need to integrate all energy flows it is important to have heat that obeys you, as we move from room to room, individual room thermostats should respond better to adventitious gains than a single living room thermostat. The factory might also be zoned so that different heating and ventilating conditions apply on a planned way at different times and places rather than having one regime for all occasions.

In the small spaces of the

home, to get heat only where you want it should not be too difficult. In the factory heating systems are often inadequate with most heat rising to beneath the roof. This can be drawn down by fans to working level. But there is still the problem of density of occupation. At one extreme 30 children may be tightly packed in a classroom, their combined heat output of around 3 kW enough to warm it on a mild winter day. At the other extreme a large warehouse may be fully heated for the benefit of two men with fork-lift trucks using it intermittently.

As density of occupation decreases it becomes more important to direct heating and ventilation selectively to people, not buildings. Fans drawing down heat from roof level, for example, could direct heat to work stations rather than the working level overall.

Generally energy conservation should not be planned and justified in isolation. Improving comfort may be a necessary end in itself. Sophisticated, automated energy management systems can incorporate wiring for fire and security alarms. Just automating lighting control may only be cost effective if done when overall rewiring is needed. Usually it will be cheaper to combine energy conservation measures with other building work.

Energy managers with a comprehensive overview are as yet relatively rare. Because of this and because energy conservation will go in phases as new measures become cost-effective, it is better to think of energy management as a role rather than as a person. Certainly someone needs a watching brief but a team of in-house staff plus outside consultants can be assembled as required.

Not surprisingly, I see architects and services engineers as people with some of the essential skills. The Department of Energy's Energy Survey Scheme subsidises visits by approved consultants (Tel. 01-211 7074). So the skills are available to take a balanced view of energy, including a prime place for buildings.

Barrie Evans  
Technical Editor, 'The Architects' Journal'

## Professions join the front

THE SCALE of the energy conservation challenge is reflected in the large number of professional bodies and learned societies associated with efforts to solve it. Although measures taken by various professions differ in quality and quantity, it is clear that the problem is being approached on a very broad front, almost reminiscent of the days of "the war effort."

To explore what is being done, the ideal place to begin is an organisation with the precise title "The Watt Committee on Energy." This is probably the most important of the independent energy bodies since it represents no fewer than 62 professional institutions and learned societies.

It was formed in 1976, chiefly at the initiative of Sir William Hawthorne, the former chairman of the Government's advisory council on energy conservation, and the Institution of Mechanical Engineers. Its aim is to provide a single independent forum in which professional people would help to contribute to the formulation of national energy policies.

The Watt Committee is very reserved about assessing the progress which its member bodies have made over conservation in the past four years. It is currently preparing a progress report which when published will probably highlight the paucity of efforts by the majority of professions, as well as the few notable success stories.

The Committee itself works through a number of working parties which report to conferences which then publish papers. The Committee also provides a forum for a dialogue between the professions and the Government whose representatives sit on its working parties.

Professional societies also exert their influence on conservation issues through other bodies such as Science Research Councils or the Building Regulations Advisory Committee. Among the most active bodies are the Royal Institute of British Architects (RIBA), the Chartered Institution of Building Services Engineers (CIBSE), as well as surveyors and town planners. Although energy was on RIBA's agenda well before the 1973-74

oil crisis, it was not until 1976 that it decided in favour of active collaboration with the Government. Subsequently joined the executive of the Watt Committee, and formed its own energy group headed by a full-time official.

It has a three-fold policy of educating members through mid-career courses and conferences; providing information and tools for design work; and exhibitions of design examples.

The mid-career energy courses were launched in 1978 with a £25,000 grant from the Energy Department. They have been attended by about 3,500 of Britain's 26,000 architects, and by several hundred civil engineers and quantity surveyors.

Future courses will be arranged jointly with the Chartered Institute of Building Services (CIBS), whose 10,000 members include specialists in heating, ventilation, lighting, water and other services in the building sector. The RIBA believes that there are 100,000 potential candidates for such courses among these and other professions. The Energy Department's grant was also used by the RIBA to set up the 30 regional energy centres on which much of the conservation activity has been centred.

The Energy Department's grant was seed money for a two-year period and there was no intention of renewing it. The Department of Environment is now, however, considering whether to make an additional £50,000 available to back the combined mid-career conservation courses contemplated by RIBA and the CIBS.

Meanwhile, a more concrete product of RIBA has been a programmable desk-top calculator which enables architects to gauge the heat loss from buildings. This was devised with the help of the fuel industry. Made by Texas Instruments, it costs in the region of £400 and enables architects to evaluate various design options from the point of view of thermal loss. An improved version of the calculator has been brought out with a broader choice of programmes presented in microchip form.

Several hundred calculators have been sold and are said to be proving useful in the profession. The RIBA has also produced a wealth of printed material and, together with the National Association of Building Centres, has created a chain of more than 60 libraries containing manufacturers' product literature.

A notable RIBA publication

was a book on "Buildings the Key to Energy Conservation," containing 50 case studies. It was published on the occasion of last October's International energy conservation month, when RIBA held a major conference and exhibition.

On another level, RIBA, in association with the British Gas Corporation, has introduced an award for energy management design. Entrants in the 1980 competition have been asked to consider the energy problems of a Victorian country house near Cheltenham which has been converted into a hotel.

One of the ways in which professions can help to solve energy problems is through the adoption of codes of practice. One of the most important codes is that being issued, in four parts, by the CIBS.

Part 1, already published, deals with basic formulas for building design, covering thermal properties, lighting, fabric and the orientation of buildings. Part 2, to appear shortly, provides comparisons of different design solutions. Parts 3 and 4, which CIBS hopes will be completed in 1980, will cover good housekeeping for existing buildings and targets for design. The whole project has been warmly encouraged by the Environment Department's building regulations department.

## Popular

Like RIBA, CIBS has a well developed regional organisation, and conservation has been a popular theme of its branch lectures.

A code of practice has also been drawn up by the Royal Institute of Chartered Surveyors, and there are proposals that the thermal qualities of houses should become a routine and prominent part of surveys provided to prospective home buyers.

In the end, though, what counts is not just the technical calibre of the various professions and their organisational commitment to energy conservation, but their realisation of its importance for future generations. A lecturer to a group of engineers recently remarked that if professional people and opinion formers were not prepared to think in terms of a low energy future, then the answer to the question "where are we up to in energy conservation?" must be: "only just past the starting post."

Maurice Samuelson

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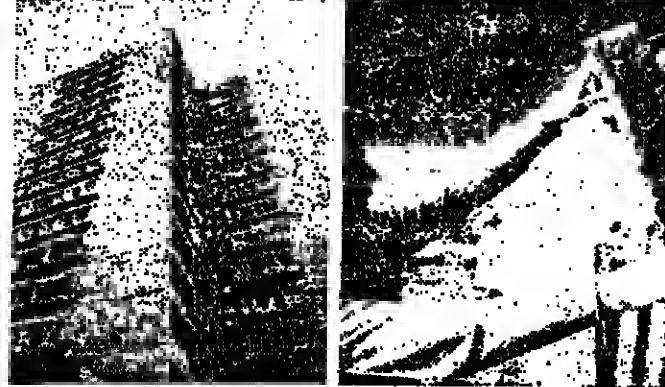
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## UK NEWS - BANK OF ENGLAND BULLETIN

## Call for a consistent policy

**MONETARY** policy will need to maintain a consistent restrictive pressure, so that inflation is brought down, and the basis thus laid for economic expansion in later years, the Bank of England argues in the assessment section of its latest quarterly bulletin, published yesterday evening.

The bulletin notes that, domestically, monetary policy has been operating against strong continuing inflationary tensions, and monetary conditions, taken as a whole, have recently been restrictive. High bank lending has been a principal expansionary factor. It is an important question as to how long companies will want to borrow, or banks to lend, on the recent scale.

"It seems probable that stocks will be substantially reduced in the period ahead; indeed this decline may be an important element in the

recession which Bank forecasts continue to suggest is likely. For this reason among others, bank lending could later fall away."

Another major source of financial pressure on firms has been rising labour costs. In some cases there have been signs of greater realism in wage settlements—evidenced by greater willingness to take account of what firms can afford to pay, or by the inclusion of significant productivity elements. But the outcome of this wage round may not, overall, show settlements lower than in the last round, which would be a disappointing result.

"Inflationary attitudes, once deeply entrenched, take time to change. Nevertheless, there remains good grounds for expecting progress in reducing inflation given both the stance of monetary policy and probable demand conditions."

On the international scene, the Bank notes that the big rise in oil prices last year implies major shifts in the pattern of international payments imbalances, with greater deficits (or smaller surpluses) for almost all net consuming countries, and an OPEC surplus as large in real terms as in 1974. The international financial system will again be called on to recycle funds on a very substantial scale.

In some respects, the markets are better equipped to respond than in 1974; sources of funds are more widely spread, more banks are participating in international lending and prudential controls have been considerably strengthened.

"The implications of these changes for the recycling problems are still not clear. There could be some fragmentation in the market, with a tendency towards smaller

loans, arranged among a narrower circle of banks. The prospect of some discriminating increase in spreads is, in itself, welcome. With returns more commensurate with the risks assumed, banks which may be holding back from the international lending market may return.

"It would be wrong to conclude that the banks will find beyond their powers problems which, as in 1974, look formidable beforehand. Nevertheless, the problems which the banks face are complex, and some are unfamiliar. It will be important that the banks, and the supervisory authorities, pay particular attention to the prudential aspects of the international banking framework, in order to maintain a system which is sound and which commands confidence.

"It seems clear that international banking flows will need to be complemented and

supported by other private flows, and by flows through official channels. It is likely that OPEC surpluses will be more persistent than they proved to be after 1974; and it is possible that the counterpart deficits will come to be more concentrated in those countries which have the greatest difficulties in adjusting to the new situation.

"Official institutions may for these reasons have a greater role to play in 1981 and subsequent years. The dual function of the International Monetary Fund in providing finance and in fostering necessary adjustments, could be particularly helpful. In the near term, thought may need to focus on ways of encouraging a fuller use of IMF resources; over a longer period, the traditional means of providing such resources may need to be supplemented."

## Output decline of 2% forecast

A DECLINE in total output of 2 per cent or more—and perhaps twice as much in manufacturing industry—now seems probable in the UK this year, according to the economic commentary in the latest Bank bulletin.

The Bank suggests that it seems likely that the principal factors depressing activity will continue and may, indeed, intensify, notably the prospect of a large fall in stocks. This follows an almost flat trend of output in 1979, mainly because of the increasing sluggishness of domestic demand and the erosion of industrial competitiveness.

The bulletin notes a fall in manufacturing employment of more than 14 per cent between August and December. "Changes in employment tend to reflect changes in output with some delay. It may be, however, that increasing financial pressures, coupled with widely-held

expectations of a downturn in activity, persuaded some employers to cut their labour forces more promptly than usual. Part of the fall may also have resulted from a restructuring of the Government's employment support schemes."

It seems that the underlying annual rate of increase in earnings moved up from about 16 to 17 per cent at the beginning of the current pay round to around 19 per cent by the end of the year.

"The compression of differentials, which was evident during the early 1970s, has continued, for non-manual workers, under recent phases of incomes policy. Earnings differentials for male manual workers changed very little after 1975; indeed, there is some evidence that they widened slightly in the two years ending in April 1979. In contrast, not only has there been a further narrowing

of differentials within the non-manual group, but the earnings of non-manual workers have continued to fall relative to those of manual workers. Similar patterns emerge for the earnings of manual and non-manual women, although women's earnings as a whole improved relative to those of men in the first-half of the decade."

"Some of the acceleration in costs during 1979 has probably yet to feed through into selling and consumer prices, and some modest quickening of inflation may be in prospect over the next few months."

The combination of the autumn tax rebates, increases in earnings, pensioners' Christmas bonuses and higher interest receipts probably raised real personal disposable incomes by around 3 per cent in the fourth quarter. Consumers' expenditure rose by rather less than 2

per cent, so that the savings ratio probably increased to 20 per cent or more.

Industrial profitability of industrial and commercial companies (excluding North Sea activities) weakened sharply last year. In the first three quarters, the real pre-tax rate of return on trading assets (after providing for stock appreciation and for capital consumption at current cost) was, on average, 31 per cent—lower than at any time since 1973.

While manufacturing productivity increased by about 41 per cent between mid-1977 and mid-1978, real earnings in manufacturing increased by more than 9 per cent. Substantial rises in raw material prices reinforced the pressure on profits in the latter part of 1978 and in 1979. Profitability is likely to weaken again this year, with the real rate of return falling to

perhaps 2 to 3 per cent. Competitive pressures may intensify, and in addition profits will suffer as activity slackens.

"Evidence of financial pressure of companies is becoming increasingly clear." In the first three quarters of 1979 the average quarterly financial deficit of non-North Sea companies (£1.3bn) was higher in nominal terms than in the crisis year of 1974 (£1bn) but still well below it in real terms.

Looking at the external prospects, "two favourable factors this year will be the further rise in production of North Sea oil and gas, and the impact of the expected recession in moderating import growth. The trade deficit in petroleum and petroleum products should be eliminated this year, although the current account will bear the cost of rising oil interest, profit and dividend

Post-tax profits increase dividends  
Oil exporters' cash for investment likely to be double

THE SHARE of post-tax profits paid out in dividends has been rising in recent years, especially when the figures are adjusted to take account of inflation.

A special article in the latest bulletin considers some of the factors influencing corporate decisions on the size of dividends and reviews the behaviour of dividends and payout ratios. The latter is defined as the ratio of dividends, gross of personal income, to post-tax earnings attributable to the equity interest.

Various measures of post-tax equity earnings can be used—conventional historic cost earnings; real equity profits calculated as historic cost profits less stock appreciation and additional depreciation needed to provide for replacement costs plus a natural gearing adjustment (that is the decline in the real value of net monetary liabilities); and real equity

THE CASH surplus of the oil exporting countries available for investment this year is expected to be at least twice as large as that identified for 1979. It could possibly be in the region of \$110bn to \$120bn.

A special article in the latest bulletin on the deployment of oil money estimates that these countries' total cash surplus in the third quarter of last year was about \$22.5bn, compared with only \$10.7bn for the whole of the first half of the year. The large mid-year oil price rises led to a marked increase in revenues, and the cash surplus for 1979 as a whole was probably about \$50bn to \$60bn.

During the third quarter, funds held in the UK rose by \$8.9bn—the largest quarterly increase since 1974. Most of this was attributable to increases in foreign currency deposits (mainly U.S. dollars). Investment in the U.S. rose by over \$2bn and there was a substantial, and widely spread, increase of \$9.2bn in bank deposits in other countries.

The surplus in the fourth quarter reflects continued high oil and gas revenues. Total placements in the UK were less than half of those in the third quarter, mainly because of

significantly lower foreign currency deposits.

New investment in the U.S. during the fourth quarter was strong, notwithstanding the U.S. freeze on official Iranian assets, and this brought the total deployment in that country for the year to around \$3bn. It is likely that there were further sizeable increases in bank deposits in other countries in the fourth quarter.

The bulletin also contains an analysis of the likely current account balances this year after adjusting for inflation, as measured by the rise in manufactured export prices since 1974. On this basis the oil exporters' surplus this year is likely to be about as large in real terms as at its previous peak.

On this occasion, however, a substantial surplus may persist for longer. Although the oil producers' trade balances may worsen in volume terms, it is unlikely to deteriorate as quickly as in 1974-75; in any case, a deterioration in volume may be offset by some further improvement in the terms of trade, although the extent of this will depend on the strength of any recovery in output in industrialised countries in 1981.

## GROSS DIVIDEND PAYOUT RATIOS

Percentages	1977	1978	1979*
Historic cost	26.4	29.0	29.2
Real**	45.0	50.0	66.1

\* First three quarters.  
\*\* Including a "natural" gearing adjustment.

profits calculated in accordance with Exposure Draft 24 of the Accounting Standards Committee. This is the basis of the new accounting standard on current cost accounting.

The article concludes that although the historic cost payout ratio may be the usual benchmark used by company management and shareholders, the real payout ratio deserves

## FINANCIAL FLOWS OF OIL-EXPORTING COUNTRIES

\$ billions	1975	1976	1977	1978	1979
Oil and gas revenues	104	129	142	138	214
Merchandise exports	113	138	153	148	224
Merchandise imports	-59	-73	-89	-104	-102
Investment, including official transfers	-25	-30	-37	-43	-45
Current balance	29	35	27	1	77
Net external borrowing, etc.	4	2	8	13	—
Surplus available for investment	33	37	35	14	—
Identified surplus from deployment table	35	37	33	13	33*

\* Data for first nine months of 1979 only.

## ESTIMATED DEPLOYMENT OF OIL EXPORTERS' SURPLUSES

\$ billions	1977	1978	1979	2nd qtr.	3rd qtr.	4th qtr.
United Kingdom						
British government stocks	—	-0.3	0.1	—	0.1	0.2
Treasury bills	-0.2	0.2	0.1	0.3	0.2	-0.6
Sterling deposits	0.3	0.2	0.2	0.1	0.4	0.7
Other sterling investments	0.4	0.1	—	0.2	0.1	0.1
British government foreign currency bonds	0.2	—	—	—	—	—
Other foreign currency borrowing	—	—	—	—	—	0.2
	4.1	-1.8	2.3	2.0	0.9	4.1
United States						
Treasury bonds and notes	4.3	-1.6	-1.2	-0.6	0.3	0.4
Treasury bills	-0.8	-0.9	—	0.4	7.0	1.9
Bank deposits	0.4	0.7	-0.7	1.1	0.7	3.0
Other	5.3	3.1	0.5	0.1	0.2	0.8
	9.2	1.3	-1.6	1.0	2.2	6.1
Other countries						
Official bilateral facilities and other investments	12.4	8.6	3.7	2.5	2.6	—
	19.9	13.6	5.4	1.9	11.8	—
International organisations	0.3	0.1	-0.2	-0.1	-0.4	0.2
Total	33.5	13.2	5.9	4.8	22.5	—

\* This table excludes liabilities arising from net borrowing and forward direct investment and also, on the assets side, changes in credit given for oil exports.

† Includes holdings of equities, property, etc.

‡ Includes loans to less developed countries.

## Trade fall-off biggest among multinationals

THE RELATIONSHIP between the extent of manufacturing industry's international integration and its trade performance in the 1970s is examined in a special article by Mr. M. Panic and Mr. P. L. Joyce of the Bank's economics division.

The article concludes that although those sectors of UK industry in which international participation is high still tend to have relatively more favourable trade balances than the rest of industry, it is in these sectors which the biggest deterioration in trade performance appears to have occurred in the 1970s.

The authors say their view is not inconsistent with other studies showing, for example, that there has been a tendency for UK exports to do least well in those products for which world demand is increasing most rapidly.

The article suggests the deterioration represents the outcome of longer-term developments. The sectors which are highly internationally integrated tend to be dominated by a relatively small number of firms, most of which operate in more than one country. This means it is open to them to decide, in order to maximise their global returns, which plants to use more intensively at any particular time, and where to expand productive capacity over a period.

The most important factors likely to affect these decisions are probably: the relative growth (actual and/or potential) of a market; the relative efficiency with which productive facilities are used, or are likely to be used; relative profitability; continuity of supply; and relative stability—that is predictability of economic developments and policies.

Such detailed evidence as

there is has tended to draw attention to the weaknesses of UK industry in a number of these areas. A comparison of productivity levels in subsidiaries of a number of multinationals in major industrial countries concluded it was lowest in the UK.

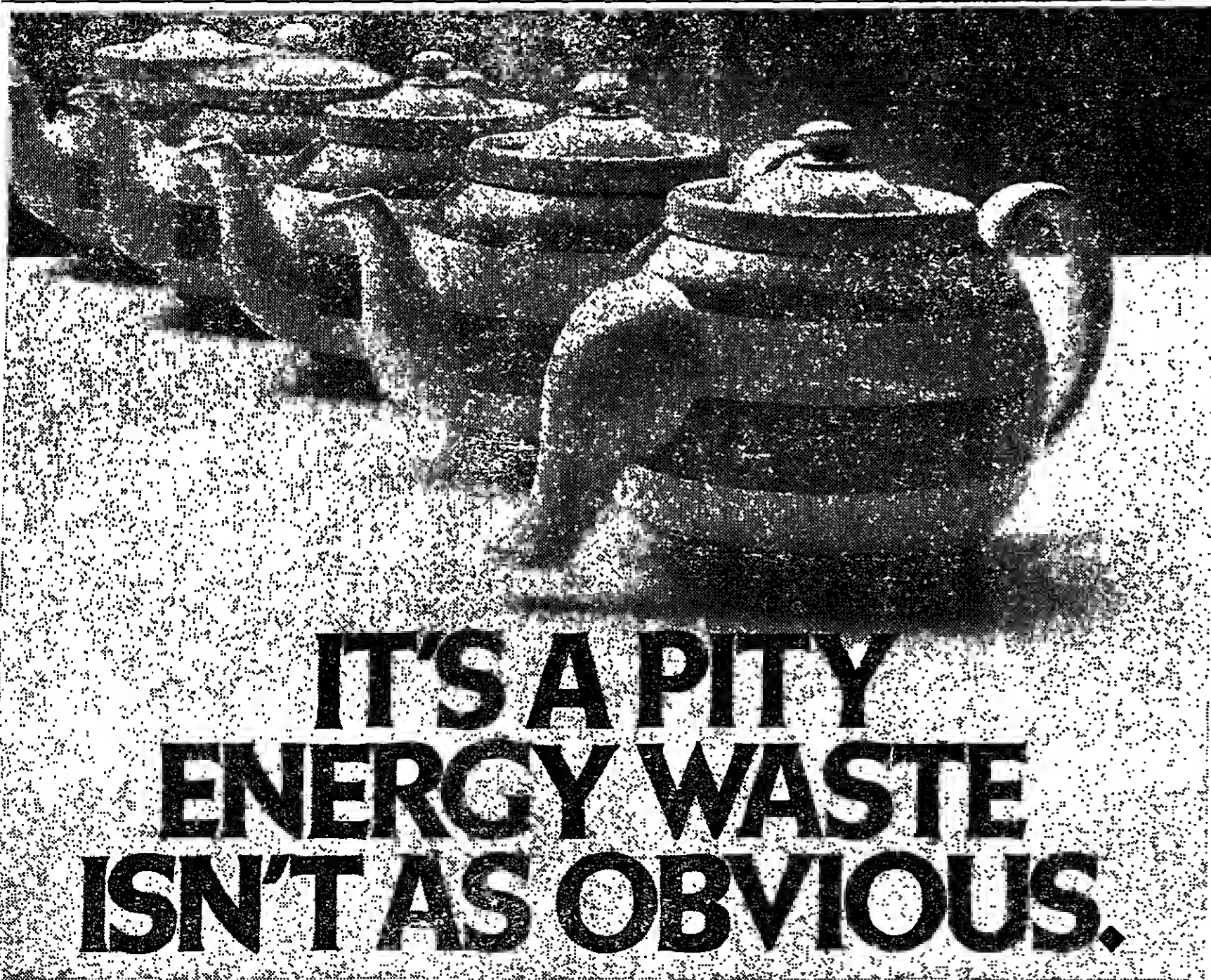
Similarly, profitability of direct foreign investment appears to have been lower in the 1970s in the UK than in Western Europe and North America.

Inflationary pressures, which were stronger in the 1970s in the UK than in many other industrial countries, may have reduced, by the uncertainties that they generated, the attractiveness of the UK as a production base.

There have been sharp increases in net direct UK investment in Western Europe and North America during the 1970s, especially in high technology sectors. There also seem to have been substantial direct investments by multinationals in the UK in the early part of the decade, particularly by those of U.S. origin. As the U.S. investments tend to be mainly in high technology sectors, it is in these sectors that most of the investment has probably taken place.

The authors quote a survey of investment intentions of the leading UK multinationals carried out in 1974 when it was pointed out that "UK companies are planning to service their new or expanded European markets mainly from Continental bases."

"This, when coupled with the evidence that Continental firms are serving their UK markets more through exports than from production facilities in the UK, is somewhat discouraging for the future growth of the UK economy."



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DEPARTMENT OF ENERGY

FT1

MAKE THE MOST OF ENERGY



## CURRENCIES, MONEY and GOLD

## £ and \$ volatile

There was no clear cut pattern to trading in yesterday's foreign exchange market, and both the dollar and sterling fluctuated quite sharply in a generally featureless market. The continued upward trend in interest rates caused some confusion among traders, and with most currencies seeing-sawing throughout the day, central banks stayed largely on the sidelines and intervened only on a very limited scale.

Sterling was weaker overall, losing 0.3 per cent of its trade-weighted index to 72.2. Against the dollar it opened at \$2.1440 and touched a high of \$2.2010 around 10 am before coming back to \$2.1830 by noon. During the afternoon it fell to a low of \$2.1580, but came back to \$2.1950 before closing at \$2.1925-1935, a fall of just 10 points from Tuesday.

The dollar eased against most currencies, reflecting in part lower Euro-dollar rates. Against the D-mark it fell to DM 1.8720 from DM 1.8765, and to SwFr 1.7710 from SwFr 1.7760 in terms of the Swiss franc. The Japanese yen was also firmer, and the dollar slipped to ¥248.50 from ¥248.70. On Bank of England figures, the dollar's trade-weighted index fell to 89.1 from 89.2 on Tuesday.

D-MARK—Steady within the European Monetary System, but weaker against dollar following higher U.S. interest rates. The D-mark was weaker overall in Frankfurt yesterday, falling against most currencies except the yen. Apart from the dollar, which was barely changed at DM 1.8770 compared with DM 1.8770, the D-mark eased against sterling, with the latter fixed at DM 4.1150 against DM 4.0890, and the French franc, which improved to DM 42.84 per

FFr 100 from DM 42.825. The Swiss franc was stronger at DM 1.0580 compared with DM 1.0519, and the Dutch guilder rose to DM 91.14 per F1 100 from DM 90.96.

**BEIJING FRANCHISE**—Weakest member of the EMS, requiring heavy support recently, but still resisting devaluation. The Beijing franc was firmer against most currencies in Brussels yesterday following a 2 per cent rise in the Beijing discount rate to 14 per cent. The dollar slipped to Bfr 30.35 from Bfr 30.54, and sterling was easier at Bfr 66.55 against Bfr 66.95. The D-mark was easier at Bfr 16.2095 from Bfr 16.2245 while the Swiss franc was the only currency to show a rise at Bfr 17.1630 against Bfr 17.081.

**SWISS FRANC**—Traditionally strong, but recent weakness has prompted relaxation of currency controls. The franc showed signs of recovering in Zurich yesterday, as foreign investors took advantage of the relaxation of controls on currency inflows. The franc's recent weak trend, especially against the D-mark, appears to have been reversed, and in early trading yesterday, the D-mark eased to SwFr 94.36 per DM 100 against SwFr 96 late last week. There was a general switching out of D-marks and into Swiss francs, and the Swiss National Bank was not seen intervening in the market.

**JAPANESE YEN**—Energy problems reflected in sharp decline last year, which after a slight recovery has been renewed, resulting in a support package, and heavy central bank intervention. The yen lost ground against the dollar in fairly light trading. The U.S. unit rose to ¥249.10 in Tokyo, unchanged from the opening level, but up from Tuesday's close of ¥248.80.

## EMS EUROPEAN CURRENCY UNIT RATES

	ECU central rates	Current amount against ECU	% change against ECU	% change against central rate	% change against divergence limit
Belgian Franc	39.7897	40.7000	+2.30	+1.45	+1.33
Dutch Guilder	7.2233	7.2200	+1.28	+1.28	+1.28
German D-Mark	2.48208	2.51060	+1.15	+0.30	+1.84
French Franc	5.48700	5.55785	+1.19	+0.68	+1.3657
Dutch Guilder	7.2233	7.2200	+1.28	+1.28	+1.28
Irish Punt	0.66201	0.67881	+1.60	+0.75	+1.688
Italian Lira	1157.79	1171.03	+1.14	+0.80	+1.408

Changes over for ECU, therefore positive change denotes a week currency. Adjustment calculated by Financial Times.

## EURO-CURRENCY INTEREST RATES

The following nominal rates were quoted for London dollar certificates of deposit: one-month 17.80-17.90 per cent; three-months 18.50-18.60 per cent; six-months 19.50-19.60 per cent.

	Mar. 18	Sterling	U.S. Dollar	Canadian Dollar	Dutch Guilder	Swiss Franc	West German Mark	French Franc	Italian Lira	Asian \$	Japanese Yen
12-month term	18.50-18.60	18.50-18.60	18.50-18.60	18.50-18.60	18.50-18.60	18.50-18.60	18.50-18.60	18.50-18.60	18.50-18.60	18.50-18.60	18.50-18.60
3-month term	17.80-17.90	17.80-17.90	17.80-17.90	17.80-17.90	17.80-17.90	17.80-17.90	17.80-17.90	17.80-17.90	17.80-17.90	17.80-17.90	17.80-17.90
6-month term	19.50-19.60	19.50-19.60	19.50-19.60	19.50-19.60	19.50-19.60	19.50-19.60	19.50-19.60	19.50-19.60	19.50-19.60	19.50-19.60	19.50-19.60
One year	20.50-20.60	20.50-20.60	20.50-20.60	20.50-20.60	20.50-20.60	20.50-20.60	20.50-20.60	20.50-20.60	20.50-20.60	20.50-20.60	20.50-20.60

Long-term Eurodollar two years 18.50-19.00 per cent; three years 19.50-20.00 per cent; four years 20.50-21.00 per cent; five years 21.50-22.00 per cent; nominal closing rates. Short-term rates are call for sterling, U.S. dollars, Canadian dollars and Japanese yen; others two days' notice. Asian rates are closing rates in Singapore.

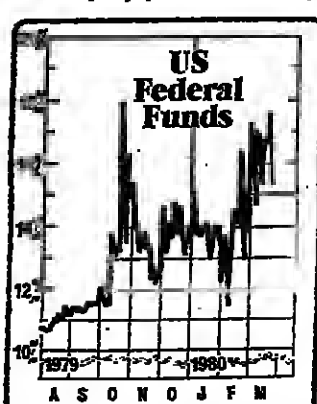
## EXCHANGE CROSS RATES

	Mar. 19	Pound Sterling	U.S. Dollar	Deutsche Mark	Japanese Yen	French Franc	Swiss Franc	Dutch Guilder	Italian Lira	Canadian Dollar	Belgian Franc
Pound Sterling	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
U.S. Dollar	1.56	1.56	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Deutsche Mark	2.48	2.48	0.40	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Japanese Yen	163.6	163.6	0.0061	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
French Franc	6.55	6.55	0.15	166.67	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Swiss Franc	2.00	2.00	0.50	166.67	166.67	100.00	100.00	100.00	100.00	100.00	100.00
Dutch Guilder	3.76	3.76	0.26	166.67	166.67	166.67	100.00	100.00	100.00	100.00	100.00
Italian Lira	2036	2036	0.0005	166.67	166.67	166.67	166.67	100.00	100.00	100.00	100.00
Canadian Dollar	0.71	0.71	1.41	166.67	166.67	166.67	166.67	166.67	100.00	100.00	100.00
Belgian Franc	36.36	36.36	0.0275	166.67	166.67	166.67	166.67	166.67	166.67	100.00	100.00

## INTERNATIONAL MONEY MARKET

## Belgian bank rate up Further rise

The Belgian National Bank raised its discount rate by 2 per cent to 14 per cent, to assist the Belgian franc which remains the weakest member of the European Monetary System and has suffered from rumours of a devaluation in recent weeks. This was the second increase in the discount rate this year, following a rise by 1½ per cent to 13 per



cent at the end of February. The discount rate is also equal to the "A" quota rate, which is charged on the first third of commercial bills discounted by the banks with the authorities. The "B" quota rate—the penalty rate at which the banks discount the remaining two-thirds of their bills—has been increased by 1½ per cent to 15 per cent.

Lombard rate, which is charged for the banks' normal monthly advances, has also been raised by 1½ per cent to 15 per cent, while special advances, charged

after the Lombard facility has been used up, was left at 18 per cent, following the increase in that rate last Friday.

These moves followed another rise in the rate on short-term Treasury certificates, by 0.35 per cent to 17 per cent for one-month, and by 0.50 per cent to 17½ per cent for two- and three-month.

Last week, the central bank spent Bfr 20bn to support the franc in the foreign exchange market, compared with Bfr 5bn the previous week.

In an official call money fell sharply to 5 per cent from 10½ per cent yesterday, reflecting excess liquidity in the money market. Overnight funds traded between 3 per cent and 5 per cent in early dealings,

## GOLD

## Gold continued to improve in the London bullion market

Gold continued to improve in the London bullion market yesterday and closed at \$317.523, a rise of \$39 on the day. Impetus appeared to stem mainly from Hong Kong and then Switzerland, and after opening at \$305.511 in London, the metal rose to \$314 at the morning close and touched a high for the day of \$332.538 just before the afternoon fixing. It was fixed at DM 28.270 (\$468.54) previously.

	Mar. 19	Gold Bullion (fine ounces)	Mar. 18
Close	\$317.523	2036.636	\$317.494
Opening	\$317.511	2036.636	\$317.478
Morning fixing	\$317.511	2036.636	\$317.478
Afternoon fixing	\$317.523	2036.636	\$317.494

overnight reserve asset money, which eased to 10 per cent in places towards the close. Trading in non-reserve asset money for very short periods up to seven days remained active, however, with houses paying 16 per cent for week fixed money, compared with 18½ per cent on Tuesday, and 17½ per cent at the beginning of last week.

In the interbank market overnight loans opened at 14½ per cent, and touched 15½ per cent, before easing to 6½ per cent towards the close.

Banks brought forward slightly run-down balances, repayment was made of the small amount lent to the houses on Monday, and there was a small net take-up of Treasury bills to finance. On the other hand Government disbursements were moderately in excess of Exchequer payments to the Treasury.

Rates in the table below are nominal in some cases.

## LONDON MONEY RATES

	Mar. 19	Sterling Certificate at deposit	Interbank	Local Authority deposits	Local Authority negotiable bonds	Finance House deposits	Discount	Company deposits	Treasury bills	Eligible Bank bills	Prime Trade bills
Overnight	—	—	6.80	—	—	—	—	17.17½	10.14	—	—
2 days notice	—	—	17½-18½	—	—	—	—	—	—	—	—
7 days notice	—	—	18½-19½	—	—	—	—	—	—	—	—
One month	—	—	17½-18½	—	—	—	—	—	—	—	—
Two months	—	—	17½-18½	—	—	—	—	—	—	—	—
Three months	—	—	17½-18½	—	—	—	—	—	—	—	—
Six months	—	—	17½-18½	—	—	—	—	—	—	—	—
Nine months	—	—	17½-18½	—	—	—	—	—	—	—	—
One year	—	—	17½-18½	—	—	—	—	—	—	—	—
Two years	—	—	17½-18½	—	—	—	—	—	—	—	—

Local authorities and finance houses seven days' notice, others seven days fixed. "Long-term local authority mortgages" normally three years 16½-17½ per cent; four years 17½-18½ per cent; five years 18½-19½ per cent; six years 19½-20½ per cent; seven years 20½-21½ per cent; eight years 21½-22½ per cent; nine years 22½-23½ per cent; ten years 23½-24½ per cent. Approximate selling rates for one-month Treasury bills 15½ per cent; two-months 16½-17½ per cent; three-months 17½-18½ per cent; four-months 18½-19½ per cent; five-months 19½-20½ per cent; six-months 20½-21½ per cent; seven-months 21½-22½ per cent; eight-months 22½-23½ per cent; nine-months 23½-24½ per cent; one-year 24½-25½ per cent. Finance Houses Base Rates (published by the Finance Houses Association) 18 per cent from March 1, 1979. Clearing Bank Deposit Rates for sums at seven days' notice 15 per cent. Clearing Bank Rates for lending 17 per cent. Treasury Bills: Average tender rates at discount 16.132 per cent.

## APPOINTMENTS

## Thames Television Board post

Mr. Ronald Denny, managing director of Rediffusion Limited has joined the Board of THAMES TELEVISION. He succeeds Mr. D. R. W. Dicks, a director of that company since its formation in 1968, who has resigned from the Board as he will reach normal retirement age at the end of this year. Mr. Denny joined the BBC in 1943 and went to ATV Network in 1955, where he later held the position of general manager of its Elstree television production centre. He became a member of Rediffusion's executive staff in 1970 and was appointed to his present position there in 1975.

Mr. W. M. Thom has been appointed, a director of RAY GROUP and continues as managing director of its painting division.

Mr. A. Ross Beleh, retiring chairman and managing director of Scott Lithgow has been appointed a director of Lloyd's of London.

Lord Chalfont has been appointed a non-executive director of SHADWICK CONSULTANTS. Lord Chalfont was Minister of State for the Foreign and Commonwealth Office (1964-1970) and his directorships include IBM UK Limited and IBM UK (Holdings).

**STRONG AND KEMBLE (INTERNATIONAL).** Mr. Peter Pummell, at present general manager of Sun Life Unit Assurance, has been appointed marketing executive of the parent concern SUN LIFE ASSURANCE. Mr. Brian Symonds who is pensions serving manager at the Society's London area office, has been made assistant executive of Sun Life Assurance as pensions development manager.

Mr. F. A. J. Smith and Mr. K. B. Boocock have been appointed directors of COMBINED ENGLISH STORES GROUP. Mr. Smith is a director of N.V. Amey. Mr. Boocock was formerly an associate director of the company.

Mr. James E. Sweeney, managing director of E. F. Hutton and Co. (London), has been appointed to the Board of LONDON COMMODITY EXCHANGE. Mr. Sweeney is a vice-president of E. F. Hutton and Co. Inc. in New York and

Professor F. G. T. Holliday, vice-chancellor of Durham University, has been appointed a non-executive director of SHELL U.K.

Dr. Eric Midwinter has been appointed director of the NATIONAL CORPORATION FOR THE CARE OF OLD PEOPLE from September 1. He will succeed Mr. Hugh Mellor, who has been with NCCOP for 29 years. Dr. Midwinter is head of the public affairs unit of the National Consumer Council.

Mr. David W. Dennen has become managing director of the LILLY RESEARCH CENTRE, Wincoburn, Surrey. He was previously the director of Antibiotic Technical Services for Eli Lilly and Co.

Mr. James E. Sweeney, managing director of E. F. Hutton and Co. (London), has been appointed to the Board of LONDON COMMODITY EXCHANGE. Mr. Sweeney is a vice-president of E. F. Hutton and Co. Inc. in New York and



Mr. Ronald Denny has been in charge of its European Commodities since 1975.

UNILOCK HOLDINGS states that following the acquisition of Ergonom International Holdings, Mr. Anthony White and Mr. William Hall, co-founders of Ergonom, are to join the Unilock Board.

## EUROPEAN OPTIONS EXCHANGE

Series	Vol.	Apr. Last	Vol.	May Last	Vol.	Jun Last	Vol.	Jul Last	Vol.	Aug Last	Vol.	Stock
ASB C	1,880	15	7.60	—	—	—	—	—	—	—	—	F.280
ASB D	1,880	15	7.60	—	—	—	—	—	—	—	—	F.280
AKZ C	1,880	15	7.60	—	—	—	—	—	—	—	—	F.280
AKZ D	1,880	15	7.60	—	—	—	—	—	—	—	—	F.280
AKZ E	1,880	15	7.60	—	—	—	—	—	—	—	—	F.280
AKZ F	1,880	15	7.60	—	—	—	—	—	—	—	—	F.280
AKZ G	1,880	15	7.60	—	—	—	—	—	—	—	—	F.280
AKZ H	1,880	15	7.60	—	—	—	—	—	—	—	—	F.280
AKZ I	1,880	15	7.60	—	—	—	—	—	—	—	—	F.280
AKZ J	1,880	15	7.60	—	—	—	—	—	—	—	—	F.280
AKZ K	1,880	15	7.60	—	—	—	—	—	—	—	—	F.280
AKZ L	1,880	15	7.60	—	—	—	—	—	—	—	—	F.280
AKZ M	1,880	15	7.60	—	—	—	—	—	—	—	—	F.280
AKZ N	1,880	15	7.60	—	—	—	—	—	—	—	—	F.280
AKZ O	1,880	15	7.60	—	—	—	—	—	—	—	—	F.280
AKZ P	1,880	15	7.60	—	—	—	—	—	—	—	—	F.280
AKZ Q	1,880	15	7.60	—	—	—	—	—	—	—	—	F.280
AKZ R	1,880	15	7.60	—	—	—	—	—	—	—	—	F.280
AKZ S	1,880	15	7.60	—	—	—	—	—	—	—	—	F.280
AKZ T	1,880	15	7.60	—	—	—	—	—	—	—	—	F.280
AKZ U	1,880	15	7.60	—	—	—	—	—	—	—	—	F.280
AKZ V	1,880	15	7.60	—	—	—	—	—	—	—	—	F.280
AKZ W	1,880	15	7.60	—	—	—	—	—	—	—	—	F.280
AKZ X	1,880	15	7.60	—	—	—	—	—	—	—	—	F.280
AKZ Y	1,880	15	7.60	—	—	—	—	—	—	—	—	F.280
AKZ Z	1,880	15	7.60	—	—	—	—	—	—	—	—	F.280

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Friendly and efficient service in a dynamic economy is the winning combination that assured our growth into a city bank of Japan. And now we're developing into an international financial complex.

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## BASE LENDING RATES

is pleased to announce the appointment of

**Mr. Candido Joaristi**

Directeur responsable for

**Latin America**

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## Keep EEC imports up Bonn urges

BONN — The West German government is opposed to reductions in EEC imports of sugar from African, Caribbean and Pacific (ACP) countries and butter from New Zealand, West Germany's Agriculture Minister, Josef Ertl, said, yesterday.

Presenting the 1980 agricultural report to Parliament, he said this was no way of solving the EEC's farm policy problems, nor was penalising vegetable fats and proteins.

These third country imports only heightened existing difficulties, Herr Ertl said. The EEC was committed to this trade by international agreements that for many reasons could not be broken.

The EEC regimes for sugar, beef and milk production should be altered to enable Community farm policy finances to stay within the set limits, Herr Ertl said. This could at the same time leave room for necessary price increases this year.

Herr Ertl said EEC producers should in future bear the cost of processing surplus milk. For other products, primarily beef, West Germany considers that EEC subsidies should be brought more into line with market demand, he said.

Reuter

## Warning of rubber price rise

The spot price of natural rubber (No. 1 RSS) could reach around 95p per kilo over the next 12 months in line with the expected rise in synthetic rubber price, according to the latest edition of Rubber Trends, issued by the Economist Intelligence Unit today.

However, a cautionary note is added that the forecast is based purely on supply and demand considerations and could be thrown off course by political and psychological factors now affecting the rubber market.

The level of stocks, particularly for synthetic rubber, is expected to increase as consumption levels off. But prices are forecast to rise by 25 per cent during the year due to the higher costs of feedstocks, affected by the oil cost increases.

Yesterday on the London spot price for natural rubber rose from 66.5p to 69p a kilo in line with the general recovery in metal and commodity markets.

## Sugar up on talk of Chinese buying

BY RICHARD MOONEY

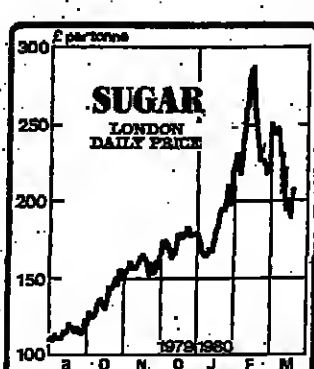
WORLD SUGAR prices gained further ground yesterday as talk of Chinese buying continued to encourage speculative interest. In spite of a late bout of profit-taking, the May position on the London futures market ended the day \$13 up at \$227.125 a tonne. Earlier the May price had reached \$233 a tonne.

Reports of Chinese purchases were again the main influence on the market, though traders became more vague as to the amounts involved. On Tuesday the talk was of purchases amounting to around 250,000 tonnes but yesterday some dealers were quoting figures as low as 100,000 tonnes.

Other factors affecting market sentiment were news of a steep decline in Indian production and a forecast of a rise in Soviet imports.

In New Delhi the Indian Sugar Mills Association said production was down 15 per cent in the first five months of this season because of drought. Output since October amounted to 2.94m tonnes, it said, against 3.49m in the same period of the 1978-79 season. Mr. R. V. Swaminathan said 14 of the 23 sugar mills in western Uttar Pradesh had stopped crushing by last week because of acute cane shortages.

In London, meanwhile, the



International Sugar Organisation estimated that last year's poor USSR sugar beet crop would push the country's import requirements up to 1.5m tonnes this year from 180,000 in 1979. The ISO predicted net import requirements from the free market will be 19.3m tonnes against 17.8m last year.

At the EEC Commission's weekly tender in Brussels exports of white sugar totalling 41,500 tonnes were authorised at a maximum rebate of 12.9 European currency units. The Commission also authorised exports of 5,000 tonnes of raw sugar with a rebate of 10.99 ECUs. Last week 57,250 tonnes of white sugar were authorised for export but there were no offers for raws.

## Call for milk sales inquiry

By The Commodities Staff

THE CASE for a Monopolies Commission investigation into UK milk marketing is strengthened by the findings of a report published recently by the Ministry of Agriculture, the Consumers' Association said yesterday.

The report by independent accountants, Blyden Hamlyn, suggested that it should be possible for milk sold through shops or independent roundmen to be cheaper than that sold at the doorstep by processor retailers, the Association claimed. "Why should these lower costs not be reflected in consumer prices?" it asked.

The Association said it broadly supported the report which drew attention to a number of anomalies in the system of milk marketing which were in need of urgent change. But it regretted that the authors did not examine the possibility of setting a maximum shop price, rather than a delivered price.

Its main observation on the report, however, was that the need for operating a costing system at all, rather than letting market forces determine prices, was "subjected to any kind of critical scrutiny."

## USSR buys Argentine grain

BUENOS AIRES—Soviet Union purchases of Argentine grain have now reached around 5m tonnes, double the amount bought from the previous crop. Maltese purchases of Argentine grain have reached 2m and 2.2m tonnes, wheat at 2m and 500,000 tonnes each of sorghum and soyabean.

In January, Argentina, the world's second largest grain exporter, refused to support the U.S. cereal boycott of the Soviet Union, saying it will let market forces determine the destination of its farm produce.

## Copper strike

THE HEAD of the Polish miners' union, Mr. Jan Les, has confirmed reports in the dissident Press of industrial unrest in mid-December in Poland's copper ore mines.

According to Mr. Les, who was speaking in an interview with the dissident Press, the miners were demanding equal pay and an equal number of days off with hard coal miners.

## Australian wool strike talks continue

BY PATRICIA NEWBY IN CANBERRA

TALKS aimed at settling the dispute which is holding up Australian wool exports will continue today in Sydney before Arbitration Commissioner Mr. Justice Williams, who has been presiding over the compulsory conference of the parties to the dispute since last Friday.

But so far the wool brokers, backed by the woolgrowers and the Federal Government, have refused to meet the union's demands for a compromise pay deal.

Mr. Rob Hawke, President of the Australian Council of Trade Unions (ACTU) said after the conference broke up late last night that there was some hope of reaching agreement. However, he and other participants refused to comment further.

The conference, which has moved from Melbourne to Canberra to Sydney, following other commitments of Mr. Justice Williams, has been looking at a proposal by the Storemen and Packers' Union to phase in higher wages for its members over a period of time and on a tiered basis.

Inflamed by the dismissal notices sent to storemen and packers not on strike in other centres, storemen on strike at the Yallara woolshed in Sydney

voted yesterday to stay on strike and not meet again to discuss the matter until May 19.

The date, two months hence, will be irrelevant if the dispute is settled before Mr. Justice Williams in the next few days.

The Federal Government's freeze on wool exports from strike-bound centres which came into effect on Tuesday, will begin to bite tomorrow night when it is applied to wool in transit—so far exempt from the freeze.

The Federal Government has taken the stand that it is prepared to halt all wool sales, thereby disrupting further Australia's commitment to overseas buyers, especially Japan.

Meanwhile wool prices have been rising in Paris in recent weeks largely as a result of the decline in Australian exports, Reuters said.

France has sufficient stocks to practice the industry sold less than 3m metres abroad.

Yet said Dr. Piccoli, EEC countries had recently used safeguard clauses to seek restrictions in Uruguayan wool fabric imports. The UK wanted to limit such imports to 185 tonnes a year, the Benelux group to 115 tonnes. This was outright obstruction to the development of an industry vital to the small Uruguayan economy.

It was vital to be said for Uruguay to maintain a wool textile industry, because it accounted for a quarter of the country's exports.

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## BRITISH COMMODITY MARKETS

### BASE METALS

COPPER—Gained further ground on the London Metal Exchange. The strong overnight performance on Comex coupled with the initial strength of gold prompted good buying of forward metal during the morning and pushed the price ahead to £1,048 on the morning trade, although trade selling was reported around this level. During the afternoon the price rose to £1,050 but the failure to break the £1,050 level and the unrelenting opening in New York encouraged profit taking which pushed the price to £1,039 on the afternoon trade. Turnover 22,200 tonnes.

Unalloyed metal trading reported



## Companies and Markets

## LONDON STOCK EXCHANGE

# Strong rally in Gold mining shares, but equity markets remain uncertain and leaders surrender early gains

**Account Dealing Dates**  
Options  
First Declared Last Account  
Dealing Date Dealing Day  
Mar. 20 Mar. 21  
Mar. 24 Apr. 10 Apr. 21  
Apr. 14 Apr. 24 Apr. 25 May 6

\*New time\* dealings may take place from 8 a.m. to 2 business days earlier.

Encouraged by Wall Street's overnight recovery, London stock markets began quite firmly yesterday. Trade in the equity sectors was extremely slow and it was left to South African Gold shares to provide most market features. A further and much stronger recovery in the bullion price generated the renewed enthusiasm for Golds which, helped by late U.S. interest, closed with substantial gains. The Gold Index index jumped 28.3 — one of its biggest-ever rises — to 294.3.

Fears of repercussions from the sharp losses incurred recently in Oil and Exploration issues appeared to subside and both sectors initially took a distinct turn for the better. For much of the day Oils gave the impression that the rally was firmly based but in the after-hours' trade went ahead on the back of a firm New York opening.

Budget uncertainties and the continuing pressure on world in-

terest rates remained a drag on general recovery and the early firmness in leading industrial shares gradually evaporated on lack of follow-through support. This was well illustrated by the FT 30 share index which surrendered a 100 gain of 4 points by noon and slipped further to record a loss of 1.9 by 2 pm before closing 0.3 higher on balance at 432.0.

As with Oils, the late trend was helped by Wall Street's opening spurt. The preliminary figures from Tubeex, up 8 at 280n, were roughly in line with market estimates. Rising international interest rates failed to deter small investment in Gil-Eddard securities. The emphasis switched to medium- and longer-dated stocks from the Variables which, awaiting today's Green Paper, consolidated Tuesday's sharp gains. Owing to stock shortages, the improvements were often disproportionate to business traded and extended to as much as 3. Shorter-dated issues lost ground around mid-morning, but on the back of the rally led to close fractionally higher on balance.

Activity in Traded options was reduced to negligible levels with only 282 contracts completed — the lowest total recorded this year.

Insurances were inclined harder in places. Willis Faber

recovery which was not maintained and most ended under the overnight levels. United, however, rose 3 to 285p, while speculative demand revived for Mairhead, 7 better at 191p. Press comment failed to inspire Henry Wigfall, 2 easier at 243p. Pressac gave up 3 to 40p awaiting today's half-time.

A lengthy list of trading statements provided interest in the Engineering sector, including a couple of penny bargains in front of the results. Tube Investments improved further on the preliminary profits which came in line with market expectations to close 8 better at the day's best of 280p. Weir Group, on the other hand, closed 14 down at a year's low of 40p on news of the shock omission of the final dividend and sharp contraction in annual earnings. Disappointing profits and a dividend cut also depressed Vespene which fell 13 to 150p but Beare Consolidated rose 5 to 88p in response to the good results and accompanying bullish statement on prospects. Jones and Shlomo moved up 3 to 125p following the best share-expected annual figures and projected 100 per cent scrip issue, while Hall, 132n, and Mellins, 110p, rose 4 and 2 respectively after trading news. Stone Platt softened a penny to 42p after adverse comment.

Business in Foods were evenly balanced and produced few notable price improvements. Bejam gained 4 to 81p in response to good half-yearly results, while revived speculative interest lifted Robertson 4 to 120p. Lockwoods, however, shed 5 to 61p on small selling.

Leading Hotels and Caterers displayed a slightly firmer appearance with Grand Metropolitan a penny harder at 134p and Truethorse Forte a little of penny to 160p.

**Jas. Walker lower**  
Profit-taking in the wake of the satisfactory interim results prompted losses of 7 in James Walker ordinary, 99p, and the N.V. 58p. Elsewhere in Stores, Lippert declined 7 to 265p, but Banners found support and ended that much better at 93p. House of Leroche gained 3 to 58p on better-than-expected preliminary profits. In Shoes, Strong and Fisher slipped 3 more to 85p following comment on the disappointing half-yearly figures.

Leading Electricals finished a shade firmer on balance. Rascal found support and added 4 to 211p, while Thora firmed a few pence to 312p. Secondary issues, weak of late, staged an attempted

recovery which was not maintained and most ended under the overnight levels. United, however, rose 3 to 285p, while speculative demand revived for Mairhead, 7 better at 191p. Press comment failed to inspire Henry Wigfall, 2 easier at 243p. Pressac gave up 3 to 40p awaiting today's half-time.

A lengthy list of trading statements provided interest in the Engineering sector, including a couple of penny bargains in front of the results. Tube Investments improved further on the preliminary profits which came in line with market expectations to close 8 better at the day's best of 280p. Weir Group, on the other hand, closed 14 down at a year's low of 40p on news of the shock omission of the final dividend and sharp contraction in annual earnings. Disappointing profits and a dividend cut also depressed Vespene which fell 13 to 150p but Beare Consolidated rose 5 to 88p in response to the good results and accompanying bullish statement on prospects. Jones and Shlomo moved up 3 to 125p following the best share-expected annual figures and projected 100 per cent scrip issue, while Hall, 132n, and Mellins, 110p, rose 4 and 2 respectively after trading news. Stone Platt softened a penny to 42p after adverse comment.

Business in Foods were evenly balanced and produced few notable price improvements. Bejam gained 4 to 81p in response to good half-yearly results, while revived speculative interest lifted Robertson 4 to 120p. Lockwoods, however, shed 5 to 61p on small selling.

Leading Hotels and Caterers displayed a slightly firmer appearance with Grand Metropolitan a penny harder at 134p and Truethorse Forte a little of penny to 160p.

**Jas. Walker lower**  
Profit-taking in the wake of the satisfactory interim results prompted losses of 7 in James Walker ordinary, 99p, and the N.V. 58p. Elsewhere in Stores, Lippert declined 7 to 265p, but Banners found support and ended that much better at 93p. House of Leroche gained 3 to 58p on better-than-expected preliminary profits. In Shoes, Strong and Fisher slipped 3 more to 85p following comment on the disappointing half-yearly figures.

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The activity in U.S. oils on Wall Street prompted a recovery in Oils here. Soon after the opening demand petered out and prices began to react but renewed interest after-hours' left quotations at the top of the day. BP and Shell both settled with gains of 8 at 359p and 362p respectively, while secondary issues featured Tricentel, which put on 18 to 285p in anticipation of today's preliminary results. Premier, a particularly active counter of late, gained 9 to 61p as speculative support increased.

**Heavy gains in Golds**  
The Gold Mines index registered one of its biggest-ever gains yesterday as the sharp recovery in the bullion price encouraged heavy buying of South African Golds. The index, which had fallen over 100 points since March 6, recovered 88 to 294.3, while the bullion price advanced 53p to 2820, the latter following reports that South Africa has restricted the amount of gold sold recently.

Revived overnight American buying led jobbers to mark up share prices at the outset. Strong local and overseas buying was reported during the morning but this tended to dry up around midday. In the afternoon, a fresh wave of buying from U.S. sources led to further heavy gains and left quotations at the day's highest.

The buying embraced most stocks and the heavyweights featured Val Beefs, 231 better at 233, while Mairhead rose 7 to 223 and Randfontein 231 up to 233. Medium-priced issues featured Harmony 124 firmer at 885p and Elyor 102 higher at 885p, while gains of 74 were common to Kintress, 515p, Doornfontein, 530p, and Welkom 575p.

The strong recovery in Golds produced sizeable gains among Financials. In South Africa, AngloGold advanced 53 to 535, GFI 214 to 223 and Union Corporation 30 to 580p; shareholders in the last-named have voted overwhelmingly to accept the terms of the bid from General Mining; the latter put on 30 to close at 750p.

London Financials also registered more rises led by Gold Fields, 19 up at 473p and Rio Tinto-Zinc, 24 firmer at 364p. Platinum and Coppers staged a broad advance following the upward movements in the respective metals prices. In Platinum, Rustenburg recovered 27 to 215p, while Coppers were featured by

## FINANCIAL TIMES STOCK INDICES

	Mar. 19	Mar. 18	Mar. 17	Mar. 16	Mar. 15	Mar. 14	Mar. 13	Mar. 12
Government Secs.	64.40	64.16	64.15	64.25	64.10	64.00	64.00	64.00
Fixed Interest	64.78	64.75	64.75	64.80	64.80	64.80	64.80	64.80
Industrial	423.0	431.7	435.2	439.0	447.0	444.0	444.0	444.0
Gold Mines	294.3	260.5	271.3	288.0	286.0	286.0	286.0	286.0
Ord. Div. Yield	7.90	7.93	7.92	7.99	7.99	7.99	7.99	7.99
Earnings, Yld. % (full)	80.34	80.34	80.34	80.34	80.34	80.34	80.34	80.34
P/E Ratio (ind. 100)	5.97	5.94	5.95	6.00	6.00	6.00	6.00	6.00
Total bargain	19,742	22,861	16,722	17,402	18,460	18,460	18,460	18,460
Equity turnover 2m	111.29	79.25	83.00	101.29	110.29	110.29	110.29	110.29
Equity turnover 5m	117.00	79.25	83.00	101.29	110.29	110.29	110.29	110.29

10 am 435.7, 11 am 433.1, Noon 431.2, 1 pm 428.2, 2 pm 428.8, 3 pm 429.3.  
Latest index 01:26:00Z.  
\*N=5.74.

Base 100 Govt. Secs. 15/10/76. Fixed Int. 1978. Industrial Div. 1/7/75. Gold Mines 12/3/75. SE Activity July-Dec. 1982.

## HIGHS AND LOWS

	1978/80		Since Completion			
	High	Low	High	Low		
Govt. Secs.	75.51 (4/5)	63.50 (10/12)	127.4 (8/1/80)	49.18 (31/7/78)	Only placed industrials Speculative	128.5 128.5 47.6
Fixed Int.	77.76 (5/1)	64.06 (10/12)	180.0 (20/1/87)	30.25 (8/1/77)		181.0 181.0
Ind. Ord.	588.6 (14/5)	406.3 (15/11)	558.3 (4/5/79)	49.4 (2/4/78)	5 1/2 A's big Guy Edged	588.6 588.6
Gold Mines	377.9 (21/10/76)	122.9 (1/7/74)	442.3 (21/10/76)	43.5 (20/1/77)	Industrials Total	180.0 180.0 24.8

## S.E. ACTIVITY

...ssina, 8 to the good at 172p,  
Minoro, 12 up at 212p.

The Australian market re-  
turned part of its poise, aided by  
recovery in overnight  
domestic markets and higher  
metal prices. Precious metal  
producers showed rises of  
under 12, these being common

to MIM Holdings, 217p,  
Bougainville, 170p. Among  
more speculative counters we  
have taken a pounding in re-  
days, Otter jumped 18 to 78p,  
Samantha's hike amount to  
Leitchard; also found support  
closed a further 25 better  
290p.

## NEW HIGHS AND LOWS FOR 1979/80

The following securities moved to new highs and lows since the start of 1979/80.

NEW HIGHS (4)	NEW LOWS (13)
Nottingham City Council	Nottingham City Council
Nottingham City Council	Nottingham City Council
Nottingham City Council	Nottingham City Council
Nottingham City Council	Nottingham City Council

## RISES AND FALLS YESTERDAY

	Up	Down	Stagnant
British Funds	66	1	23
Corps. & Govt. Bonds	5	61	1
Foreign Bonds	259	278	895
Industrial and Prop.	130	106	264
Insurance	36	2	4
Life	11	8	16
Mines	117	8	35
Others	55	34	37
Totals	671	429	1,506

LONDON TRADED OPTIONS									
Option	Expiry	Price	Vol.	Expiry	Price	Vol.	Expiry	Price	Vol.
BP	30	25	20	30	25	20	30	25	20
BP	30	25	20	30	25	20	30	25	20
BP	30	25	20	30	25	20	30	25	20
BP	30	25	20	30	25	20	30	25	20
BP	30	25	20	30	25	20	30	25	20
BP	30	25	20	30	25	20	30	25	20
BP	30	25	20	30	25	20	30	25	20
BP	30	25	20	30	25	20	30	25	20
BP	30	25	20	30	25	20	30	25	20

## FT-ACTUARIES SHARE INDICES

These indices are the joint compilation of the Financial Times, the Institute of Actuaries and the Faculty of Actuaries

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## ACTIVE STOCKS

The following table shows the percentage changes which have taken place since December 31, 1979, in the principal equity sectors of the FT Actuaries Share Indices. It also contains the Gold Mines Index.

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## Carter, Reagan sweep Illinois

By David Buchan in Chicago

PRESIDENT JIMMY CARTER and Mr. Ronald Reagan now seem almost certain to face each other in the U.S. November Election. Both won handsomely in Illinois' Presidential primary elections on Tuesday.

Their chief opponents, Senator Edward Kennedy and Mr. John Anderson, respectively, did worse than expected in this big industrial state.

The two parties' nominations will not be formally bestowed by national conventions until July and August. But the lengthening primary successes by Mr. Carter and Mr. Reagan have steadily — and perhaps after Illinois conclusively — stacked the political arithmetic in their favour.

Mr. Carter scored the more crushing victory, beating Senator Kennedy by a 65-30 per cent margin in the preference poll (90 per cent of votes counted). He achieved the surprise feat of carrying Chicago and all its ethnic voting blocs, despite Mayor Jane Byrne's strident support for the Massachusetts senator.

In the contest for delegates to the summer convention, Senator Kennedy did even worse, with incomplete returns showing 16 for him and 184 for the President.

Mr. Anderson, earlier expected to give Mr. Reagan a close run in his home state, failed to stop the front-runner's advance. Mr. Reagan won 48 per cent, Mr. Anderson 37 per cent and Mr. George Bush came a lame third with 11 per cent (84 per cent of votes counted).

Mr. Anderson, the latest moderate in the nomination race, won many votes from the Democrats and Independents — Illinois' rules permit voters to vote in either party's primary.

Early indications in Illinois' complex delegation selection process show 42 for Mr. Reagan, 24 for Mr. Anderson, four for Representative Philip Crane, who got nowhere in the preference poll, and two for Mr. Bush.

President Carter needs 1,666 convention votes to win the nomination, while 998 is the magic figure for Mr. Reagan.

These figures are just one over half all delegates to the forthcoming conventions. With Illinois, President Carter has 448 delegates, and Senator Kennedy, 181. Mr. Robert Strauss, the President's campaign manager, said yesterday that, if delegates chosen by caucus in some states are included, the lead is more like 3 to 1.

Chicago's political machine staffers, Page 4  
Feature, Page 23

**Weather**  
UK TODAY  
MOSTLY cloudy with outbreaks of light rain, sleet or snow. London, S.E. Central, Southern England, Wales  
Cloudy, light rain, sleet or snow. Max. 3C (37F).  
E. N.E. England, Borders, Edinburgh, Aberdeen  
Highlands  
Bright spells, scattered wintry showers or sleet. Max. 4C (39F).  
N.W. England, Lakes, S.W. Scotland  
Sunny intervals, wintry showers. Max. 4C (39F).  
N.E., N.W., Scotland, Orkney, Shetlands  
Becoming cloudy, sleet or snow later. Max. 4C (39F).  
Outlook: Continuing cold and changeable.

WORLDWIDE

City	Temp	Wind	Cloud
Algeria	13	55	13
Amman	13	55	13
Athens	13	55	13
Bahrein	13	55	13
Bangkok	13	55	13
Batavia	13	55	13
Bombay	13	55	13
Buenos Aires	13	55	13
Calcutta	13	55	13
Cairo	13	55	13
Cardiff	13	55	13
Cebu	13	55	13
Colon	13	55	13
Dublin	13	55	13
Edinburgh	13	55	13
Faro	13	55	13
Frankfurt	13	55	13
Glasgow	13	55	13
Hankow	13	55	13
Hong Kong	13	55	13
Imbabura	13	55	13
London	13	55	13
Lyons	13	55	13
Manila	13	55	13
Medan	13	55	13
Mexico City	13	55	13
Montevideo	13	55	13
Mumbai	13	55	13
Nairobi	13	55	13
Paris	13	55	13
Peking	13	55	13
Rangoon	13	55	13
Reykjavik	13	55	13
Rio de Janeiro	13	55	13
Singapore	13	55	13
Sofia	13	55	13
Taipei	13	55	13
Tokyo	13	55	13
Winnipeg	13	55	13
Zurich	13	55	13

## Hunterston B litigation likely

BY ROY HODSON

THE TROUBLED story of the Hunterston B nuclear power station on the Clyde, which has failed to achieve forecast electricity output, is likely to be examined in the courts in an action between British Aluminium and the North of Scotland Hydro-electric Board.

British Aluminium said yesterday in a note accompanying its 1979 results that it has set aside £19.4m (of which £10m relates to 1979) to provide for disputed charges for the supply of electricity to the Invergordon aluminium smelter.

The company does not accept liability for any of these charges.

Power for the smelter comes from the Hunterston B power station which has encountered serious difficulties. Based on the British AGR (Advanced Gas-cooled Reactor), it has not achieved its planned load factor because of problems in the design.

Output was also cut after seawater entered the cooling system, putting one of the two reactors out of service from October 1977 to this year.

Finally, the cost of producing power at Hunterston has risen sharply because of nuclear fuel cost increases.

The dispute between the company and the Board mainly concerns the escalation clauses contained in the 1968 contract over the supply of electricity. While the contract provides for escalation of fuel and operating costs, the company argues that it is not liable for extra costs arising from technical problems with the AGR design and from the operating error which led to the seawater leak.

The Invergordon smelter supplies more than 100,000 tonnes a year of aluminium. It was one of three British smelters backed by the Labour Government in the late 1960s to substitute home aluminium production for imports.

The North of Scotland Hydro-electric Board is expected to start legal proceedings over the disputed electricity costs. The board said last night: "We have not taken such action yet and it is too early to say anything further at this stage."

British Aluminium's long-term contract for electricity involved paying part of the capital cost of the Hunterston power station with the backing of a Government loan; it also pays a share of the mining costs.

But the company claims it should not have to pay for the defects in performance that have arisen since the station has been producing electricity.

The station itself is the responsibility of the South of Scotland Electricity Board, which transfers the power to the North of Scotland Hydro Electric Board.

The Anglessey Aluminium consortium (one-third Rio Tinto Zinc and two-thirds Kaiser Aluminium, of Oakland,

California) is looking closely at its own contract for the supply of electricity to its aluminium smelter at Holyhead, North Wales.

In a deal which is similar to the British Aluminium contract in outline but differs in detail the Anglessey consortium is getting power from the Central Electricity Generating Board based on the notional cost of electricity produced by the Dungeness B AGR station.

Dungeness B is 12 years late in construction and is unlikely to produce power before the end of this year. The consortium deal is based on buying a block of power from Dungeness.

The consortium believes it is unlikely to be embarrassed by problems arising from the station's performance or extraordinary costs due to fuel price increases or repairs.

Disputed contract for nuclear electricity, Page 8  
British Aluminium results, Page 24

## Mexico to produce more oil

BY WILLIAM CHISLETT IN MEXICO CITY AND RAY DAFTER IN LONDON

MEXICO is to raise its oil production to 500,000 barrels a day later this year, a move which will help relieve pressure in the international market.

Increased output will be used to meet rising domestic demand, but within the industry it is thought sufficient will be available to boost exports above the target of 1.1m barrels a day.

Mexico had intended to produce no more than 2.25m barrels a day this year, but the Government clearly feels confident that new production wells will enable output to grow to 2.2m b/d.

Extra output will help dampen the West's demand for oil from members of the Organisation of Petroleum Exporting Countries. As it is, economic stagnation within

developed countries and a mild winter in the northern hemisphere have reduced demand for OPEC oil.

Mexico has underlined its emerging strength as an international oil power not only through its rising production figures but also through the upward adjustment of its reserve estimates.

Dr. Jorge Diaz Serrano, head of the country's state oil corporation, Pemex, said proven reserves of oil had risen from 45bn to 60bn barrels—the sixth largest in the world and sufficient to satisfy Mexico's present needs for 64 years.

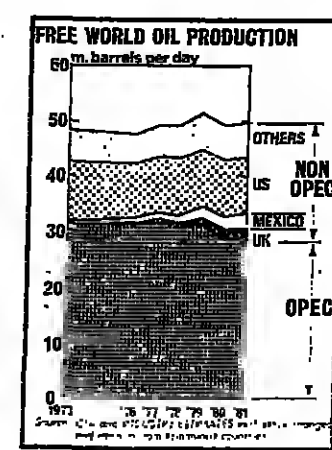
The announcement was made at celebrations to mark the 42nd anniversary of the nationalisation of Mexican oil. The increase in reserves has arisen largely as a result of new information obtained from the Bay of

Campeche, where wells are now yielding an estimated 500,000 b/d.

Total Mexican production is currently 2m b/d, of which some 800,000 b/d are exported. Pemex has already committed itself to supplying about 1.1m b/d of exports. The expected recipients of this oil will be U.S. (about 700,000 b/d), Spain (180,000 b/d), Israel (45,000 b/d), France (100,000 b/d), Japan (100,000 b/d) and Brazil (20,000 b/d).

Pemex is not saying where any additional exports will be sent, but Canada and Japan are the favourites. Significantly, the Mexican President, Sr. Jose Lopez Portillo, will visit Canada in April, and will receive the Japanese Prime Minister later.

Mexico's aim is to export some 60 per cent of its externally-traded oil to the U.S., with the



FREE WORLD OIL PRODUCTION  
50 m. barrels per day  
OPEC  
NON OPEC

remainder being divided equally between Western Europe and Japan.

Sr. Portillo did not state how Mexico's production would move in the coming years although the long-term speculation in Mexico City that the production level could rise as high as 4m b/d.

## Japan increases power prices

BY RICHARD C. HANSON IN TOKYO

THE Japanese Government yesterday approved big price increases for electricity and gas but took steps to insure these did not work against its latest anti-inflation measures.

On Tuesday the Government initiated increases in Leasing Rates by raising the official discount rate 1.75 percentage points to 9 per cent.

Yesterday, it approved a 50.3 per cent average increase in electricity rates and a 45.3 per cent rise for gas to take effect on April 1.

To soften the inflationary blow the cabinet said it would strengthen its monitoring of speculative stockpiling and price increases, release commodity stockpiles and order price cuts in public services whenever possible.

The jump in electricity rates is the largest since 1974. However, it was below the original Electric Power Company request for an average 64.4 per

cent rise. Electricity for industry will be about 54 per cent dearer, with domestic electricity costing 43.3 per cent more.

The electric and gas rate increase will add 1.7 per cent to the annual rate of consumer price inflation directly, with indirect ripples adding another 0.5 per cent. Consumer prices were already running at an annual rate of 7.6 per cent in February.

The Government said it would use its influence to keep companies from raising the price of goods solely because of higher electricity costs. These also plans to lower the tax on electricity, but the Government did not say when or by how much.

To stabilise the price of fresh foods, the responsible Ministries will tighten surveillance on the foodstuff markets and if supply conditions allow, the Government said it would increase the import of beef.

Beef is a very expensive item in Japan because of protectionist import quotas set by the Ministry of Agriculture.

Land prices will also come under sharper scrutiny and the Government will further its efforts to promote energy saving.

The Government is anxious at least to put up a strong show of fighting inflation, partly because negotiations with the unions on this year's wage increases are starting in earnest. So far the unions have made fairly moderate demands, but as the consumer price index begins to climb pressure for higher wages could build.

Japanese prices have been rising sharply at the wholesale level since last year as a result of higher oil prices. The Wholesale Price Index is rising at an annual rate of 20 per cent, and is not expected to peak until the April-June quarter.

Editorial Comment, Page 22

## CBI seeks picketing curbs

By John Elliott, Industrial Editor

CBI LEADERS decided yesterday to step up their pressure for legislation making all forms of secondary industrial action unlawful.

Sir John Methven, CBI director general, is to have urgent talks this morning with Mr. James Prior, Employment Secretary, and will say that ideally the present Employment Bill should be amended immediately to cover this point.

Alternatively, a consultative document should be published immediately together with a firm pledge that a second Bill will be introduced soon.

The CBI also decided to ask the Government to insert a clause in the Bill requiring companies to provide facilities for secret ballots where requested by trade union members in accordance with union rules.

The idea was proposed by Lord Robens, chairman of the Robens Committee, and former chairman of the National Coal Board.

His idea is to make it easier for employees to take part in union ballots involving issues such as the election of local union officials and shop stewards.

The new demand for curbs on secondary action is likely to generate fresh controversy over the Government's labour law plans. It reflects growing frustration among employers during the steel strike over the limitations of complex labour laws.

It also amounts to a rejection of the Government's present plans which would permit secondary action against companies closely associated with an employer in dispute.

Members of the CBI council said yesterday that the legal definitions proposed by the Government were so complicated that they might deter companies from starting civil proceedings.

## Post Office seeks staff flexibility

BY NICK GARNETT, LABOUR STAFF

THE POST OFFICE may make part of its basic annual pay offer to postmen conditional on union agreement over labour flexibility.

This is one of a number of options being studied by the corporation following the rejection by the industry's biggest union of a national staffing and productivity package which was regarded as crucial to improving postal efficiency.

Earlier this week a special conference of the Union of Post Office Workers threw out proposals to use casual labour in the summer as well as measures to improve labour flexibility for sorting and supervisory work and new work roles.

Post Office management is still licking its wounds and has not yet decided how to proceed further. There is considerable pressure, though, to try to retrieve some of the rejected proposals by trying them directly

into this year's wage negotiations. These are due for settlement next month.

Management is also looking at the introduction of casual labour this summer to prevent severe mail backlogs in spite of no union approval.

The Post Office can technically introduce casual labour during summer without falling foul of any union agreement. Successful use of casual labour depends, however, on shop-floor willingness from union members to co-operate.

A third option—to reformulate the staffing and productivity package—is also under examination, but there is apparently little inclination to do that. This is because the original package was wrecked by the delegate conference in such a way that it would probably be fruitless for the Post Office to pursue this further.

Management is waiting to hear the contents of the Monopolies Commission report on the London service. It might then use what are expected to be some considerable criticisms of the corporation in the report as part of an internal campaign to persuade the postmen to accept staffing alterations.

Some managers feel, however, that they might not be able to make up lost ground on productivity before the Department of Industry decides its attitude to the national postal monopoly, which it is now reviewing.

The union is holding a further staffing and productivity conference for clerical workers later this month. There is considerable optimism that staffing changes will be agreed at that conference.

Editorial Comment, Page 22

## No public funds for Channel tunnel

BY LYNTON MCLAIN

PUBLIC FUNDS will not be used to help build either a tunnel or a bridge across the Channel.

Instead, the Government expects private risk capital to meet the cost of a commercially viable link. Mr. Norman Fowler, Transport Minister, told MPs in the Commons yesterday.

British Rail, now working on final proposals for a £860m single-track tunnel with French Rail, responded swiftly to the Government statement.

It said that by the summer—when the plan goes to the Government—it is confident it

will be able to secure private finance.

The BR board and French Rail have talked to the European Investment Bank and to British financial institutions and banks. BR said the talks had been "encouraging".

BR said last night that after Mr. Fowler's clear policy statement it now recognised it would have to be confident of raising private finance for its proposal to have any chances of being accepted by the Government.

Coopers and Lybrand and SETEC Economie of Paris, management consultants, wrote

a report for the European Commission saying all current proposals for fixed Channel links may be viable. But they regarded their conclusions as "provisional and unreliable until further work has been carried out."

The BR/French Rail proposals for a single-track, rail-only tunnel could yield a 14.3 per cent rate of return, after taking account of inflation, on average each year over a 50-year period, according to a report now with the European Commission in Brussels.

Mr. Fowler told MPs that

he had examined the preliminary proposals by BR and French Rail. But he said that more needed to be done before the "full implications of the scheme can be judged."

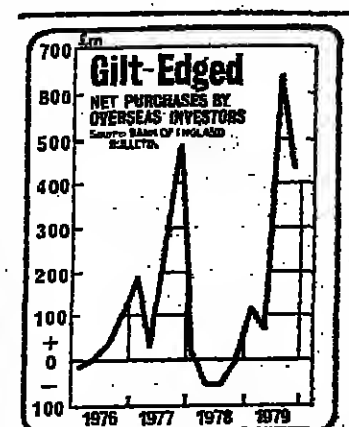
He also said that "variations on the proposals—might offer different advantages," a reference to the range of other, private-sector schemes being drawn up and to the possibility that the BR/SNCF proposal for a single tunnel may come to be seen as the first stage of a long-term plan to build twin tunnels.

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## THE LEX COLUMN

# The light at the end for Tubes

Index rose 0.3 to 432.0



The market has been well prepared for the results from Tube Investments, but familiarity does not make a pre-tax profits fall of 35 per cent to £52.2m any better. It is left to the group to point to the specific damage caused by last year's disputes—maybe £20m worth by the engineering troubles and a sizeable but unquantifiable figure for the haulage strike—and to suggest that the recovery potential is substantial. The British Steel strike, at least, does not appear to be causing any great problems so far, given that TI gets around a third of its steel from the still operational half-owned (with the BSC) Round Oak plant, and even before the dispute was getting another third from abroad.

But international competition is clearly biting hard in a number of areas, from British Aluminium—which is entering a legal battle over its electricity costs, and where the pre-tax margin on sales slumped from 11.9 to 7.4 per cent—Raleigh Industries, which has turned round from pre-tax profits of £5.4m for 1978 to a loss of £8.2m last year. The volume fall in cycles was a fifth, with key markets like Nigeria turning sour.

However, the domestic appliances division appears to have done well in cookers and central heating boilers, and has brought the washing machine business to breakeven point. Moreover TI kept its cash deficit to only £14m in 1979, though its hankering after U.S. acquisitions could lead it to test its bankers shortly.

Its decision to ignore some dismal current cost figures and raise the dividend is intended as an expression of confidence, and indeed TI is expecting recovery in several areas (with a return to profits in cycles). But with the shares on a yield of 13.6 per cent, the market is inclined to wait and see.

But for the rights issue, net borrowings would have risen by £118m last year. Tilling spent £74m on acquisitions, which brought something like £30m of their own debt into the group; the cash outflow from the existing businesses was small, and should again be modest in 1980. Net debt represents 34 per cent of shareholders' funds, but stripping out goodwill and the recent property revaluation, the ratio rises to 42 per cent, without the rights issue it would have been 69 per cent.

This year Tilling looks set to make at least £80m. Many of its businesses—medical supplies, oil industry equipment and insulation material, for example—should be proof against any fall in general demand, and there will be a gain from having 1979 acquisitions in for a full year. This leaves the shares, up 9p at 133p yesterday, on a prospective p/e of 7.3 or so, with a historic yield of 7.3 per cent, which does not look too demanding. The only trouble is that there may be a fair amount of selling in the region of 1980, the year at which the underwriters salvaged the last rights issue.

**Dividends**  
On a day when Tube Investments raised its dividend while making a current cost loss, the Bank of England's Quarterly Bulletin was drawing attention to the ease with which, during inflationary periods, companies are able to distribute their "real" capital, as measured on a replacement cost basis. The Bank surmises that dividends would probably have been lower in some recent years if an accounting standard based on ED 24 had been in general use. The Bank makes the point that gross funds, which have

increasing power in the equity market, have a decided preference for income rather than retention by the companies in which they hold shares. The Bank might have gone on to discuss how weak companies have been forced to keep payout ratios high in order to hold up their share price, maintain the possibility of access to the rights issue market and protect themselves from takeover.

A recent paper from Messrs de Zoete and Bevan argued that inefficient companies are actually right to over-distribute because their inability to earn satisfactory returns gives them no justification for reinvesting cash flow. In the long run, on this basis, inefficient companies should gently fade away. In the real world there is plenty of over-distribution, but the companies in question tend to keep going by selling assets or issuing more paper, neither of which may be in their shareholders' interests.

**DRG**  
A cheerful forecast for the current year, together with a healthy 16.4 per cent rise in pre-tax profits to £27.7m in 1979, pushed up Dickinson Robinson Group shares by 7p to 101p yesterday. Even stripping out the European contribution, which has been distorted by the acquisition of the remainder of Las Couronne, there has been a solid increase in volume and an improvement in operating margins.

The group has been able to pull back an £18m net cash outflow at half-time to £10.5m by the end of the year mainly through a savage squeeze on net working capital, which fell from 32 to 20 per cent of turnover. But this can hardly be repeated in the current year, and with capital expenditure of £32m planned, the cash outflow is likely to be about £15m. In charges, already nearly doubled in 1979 at £7.5m, will therefore rise substantially; further, which may threaten the forecast of increased profits.

There are signs that the company's determination to revitalise itself—dating from 1977—is proving effective. Trouble spots like Croyley and Merton should start producing profits this year. The exploitation of potential growth areas will take longer, although 1979's French and South African acquisitions look extremely shrewd. With a p/e of 6.7, fully-taxed, and a yield above 12 per cent, the market is leaving plenty of room for pleasant surprises.

Thomas Tilling

Thomas Tilling's pre-tax profits advanced from £64.9m to £81.1m in 1979, and the net dividend has been raised by 45 per cent to 7p, a penny more than the group indicated at the time of its £59m rights issue last May. New acquisitions (mostly in the U.S.) contributed an impressive £12.5m after interest costs, which leaves the original businesses £4m up—not a bad performance considering the impact of strikes and bad weather on the engineering and construction divisions.

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